

B2AGI Physical AI Ranking 2027

Complete seven-list reference

390 entries with roles, selection rationales, evidence scopes and linked source references.

2027 edition · October 2026 assessment baseline · v1.0

Countries and clusters are comparative rankings. Companies, people and institutions are contribution-based selections. Record IDs provide stable references.

Section headings define Current 100 and Next 100 membership. C/N prefixes remain part of the original, persistent record identifiers.

Country and cluster coverage is global. Organizational selections center on Korea, China and the United States, with relevant contributors from other markets.

Countries & Economies - Top 20 · 20 entries

Cities & Industrial Clusters - Top 20 · 20 entries

Current 100 · 100 entries

Next 100 · 100 entries

Influence 50 · 50 entries

Ecosystem Builders 50 · 50 entries

Institutions 50 · 50 entries

Intelligence / Physical / Capital / Trust / Beyond

Each source-reference ID below is linked to its original publisher. Keep the record ID, evidence reference and file version when citing an entry.

Countries & Economies - Top 20

Qualitative comparative assessment

01 United States [country:01]

National industrialization assessment

Selection. The United States brings general-purpose models and robotics platforms into named customer tasks, supported by growth capital and operating records.

Evidence scope. IFR 2025 installation data, operating and customer records, technical platforms, completed financing and operating permissions.

Sources: country:01:S1 · country:01:S2 · country:01:S3 · country:01:S4 · country:01:S5 · country:01:S6 · country:01:S7 · country:01:S8 · country:01:S9

02 China [country:02]

National industrialization assessment

Selection. China combines sensing, robot hardware and electronics manufacturing with product development and dense supply chains. Industrial-robot demand supports this manufacturing base.

Evidence scope. IFR 2025 industrial-robot installations and domestic supplier share; manufacturer and customer records; research, financing, testing and shared development infrastructure.

Sources: country:02:S1 · country:02:S2 · country:02:S3 · country:02:S4 · country:02:S5 · country:02:S6 · country:02:S7 · country:02:S8 · country:02:S9 · country:02:S10 · country:02:S11

03 South Korea [country:03]

National industrialization assessment

Selection. Korea combines research investment with NAVER's cloud-based robot coordination, KAIST's learned locomotion control and university-led robotics commercialization.

Evidence scope. NAVER's internal operations; KAIST's July 2026 HOUND experiments and February 2026 report on technology-transfer and investment activity. The March 2026 testbed demonstration and planned external access retain separate stages. Economy-wide research indicators provide context.

Sources: country:03:S1 · country:03:S2 · country:03:S3 · country:03:S4 · country:03:S5 · country:03:S6 · country:03:S7 · country:03:S8 · country:03:S9 · country:03:S10 · country:03:S11 · country:03:S12 · country:03:S13

04 Japan [country:04]

National industrialization assessment

Selection. Japan brings perception and motion generation into established manufacturing processes, building on robotics and precision-control capabilities.

Evidence scope. JARA calendar-2025 production and shipments, IFR installations, robot-control and customer records. JARA includes dedicated manipulators; production and installation measures retain separate definitions.

Sources: country:04:S1 · country:04:S2 · country:04:S3 · country:04:S4 · country:04:S5 · country:04:S6 · country:04:S7 · country:04:S8 · country:04:S9 · country:04:S10 · country:04:S11

05 Germany [country:05]

National industrialization assessment

Selection. Germany brings industrial customers, intelligent integration providers and external testing and approval into the same deployment pathway.

Evidence scope. Manufacturing demand, customer-process integration, industrial fleets and testing services. Overseas customer installations retain their operating locations.

Sources: country:05:S1 · country:05:S2 · country:05:S3 · country:05:S4 · country:05:S5 · country:05:S6 · country:05:S7 · country:05:S8 · country:05:S9 · country:05:S10

06 United Kingdom [country:06]

National industrialization assessment

Selection. The United Kingdom develops local robotics models and robot-learning hands through documented joint development.

Evidence scope. Driving trials, DEX-EE and DemoStart research, model development, financing and reusable tools. Joint international research retains shared attribution.

Sources: country:06:S1 · country:06:S2 · country:06:S3 · country:06:S4 · country:06:S5

07 Switzerland [country:07]

National industrialization assessment

Selection. Switzerland's ANYmal brings learned control into industrial inspection workflows.

Evidence scope. Learned inspection and locomotion, research-to-product transfer, institutional and financial context, with development and customer sites separately attributed.

Sources: country:07:S1 · country:07:S2 · country:07:S3

08 France [country:08]

National industrialization assessment

Selection. France provides open robot-learning tools and develops general-purpose manipulation models alongside hardware integrations.

Evidence scope. Warehouse implementations, robot-learning tools, manufacturing integration, financing and testing access. Joint French-US development retains shared attribution.

Sources: country:08:S1 · country:08:S2 · country:08:S3 · country:08:S4 · country:08:S5 · country:08:S6 · country:08:S7

09 Canada [country:09]

National industrialization assessment

Selection. Canada develops physical manipulation learning, industrial tools and truck-OEM integration through distinct product pathways.

Evidence scope. Industrial robot suppliers, shared research assets and supervised freight development. Waterloo and Toronto activity retain separate locations.

Sources: country:09:S1 · country:09:S2 · country:09:S3 · country:09:S4 · country:09:S5 · country:09:S6 · country:09:S7

10 Taiwan [country:10]

National industrialization assessment

Selection. Taiwan combines semiconductor fabrication and packaging with R&D, robotics investment and industrial testing infrastructure.

Evidence scope. NSTC 2024 R&D expenditure; TSMC fabrication and packaging; electronics and robotics records; ITRI testing and incubation infrastructure.

Sources: country:10:S1 · country:10:S2 · country:10:S3 · country:10:S4 · country:10:S5 · country:10:S6

11 Denmark [country:11]

National industrialization assessment

Selection. Denmark supplies AMRs for transport and collaborative robots for AI greenhouse harvesting, with named customer tasks.

Evidence scope. UR and MiR platform supply, Odense development infrastructure, DTI incubation and Danish industry records. National turnover and local cluster activity retain separate scopes.

Sources: country:11:S1 · country:11:S2 · country:11:S3 · country:11:S4 · country:11:S5 · country:11:S6

12 Sweden [country:12]

National industrialization assessment

Selection. Sweden connects robotics research and industrial tasks through WARA Robotics and WASP doctoral training, alongside ABB development, ISO standards work and Hexagon's humanoid programme.

Evidence scope. WARA's December 2024 industry-linked challenge and WASP's May 2026 graduate statistic; domestic ABB development and multinational Hexagon activity retain their locations. The new ABB campus is scheduled for 2027.

Sources: country:12:S1 · country:12:S2 · country:12:S3 · country:12:S4 · country:12:S5 · country:12:S6 · country:12:S7

13 Singapore [country:13]

National industrialization assessment

Selection. Singapore brings foreign robot hardware into power-tunnel inspection through local integration and operation.

Evidence scope. Power-tunnel inspection, retail integration, local operators, research and institutional context; country and cluster profiles cross-reference shared events.

Sources: country:13:S1 · country:13:S2 · country:13:S3 · country:13:S4 · country:13:S5

14 Netherlands [country:14]

National industrialization assessment

Selection. The Netherlands combines a documented warehouse-automation installation with an automation-finance role serving an overseas site.

Evidence scope. ASML equipment and R&D, domestic warehouse integration, testing services and separately located overseas automation finance.

Sources: country:14:S1 · country:14:S2 · country:14:S3 · country:14:S4 · country:14:S5 · country:14:S6

15 Israel [country:15]

National industrialization assessment

Selection. Israel develops observation-based physical manipulation and driver-assistance technology, supported by research investment and national AI computing access for academia and industry.

Evidence scope. Manipulation development, eyes-on SuperVision assistance and acquisition records. January 2026 national computing infrastructure is operational; accelerator allocations extend over subsequent years.

Sources: country:15:S1 · country:15:S2 · country:15:S3 · country:15:S4 · country:15:S5

16 Australia [country:16]

National industrialization assessment

Selection. Australia hosts autonomous construction at a solar site and shared physical testing by public research teams.

Evidence scope. Komatsu's September 2025 Australian operating fleet, Rio Tinto Pilbara rail and drilling, and a separately staged construction pilot.

Sources: country:16:S1 · country:16:S2 · country:16:S3 · country:16:S4 · country:16:S5 · country:16:S6

17 Italy [country:17]

National industrialization assessment

Selection. Italy's industrial robotics integration extends into AI logistics trials in a named customer environment.

Evidence scope. IFR manufacturing installations, located industrial automation supply, customer integration and European testing infrastructure.

Sources: country:17:S1 · country:17:S2 · country:17:S3 · country:17:S4 · country:17:S5 · country:17:S6

18 Spain [country:18]

National industrialization assessment

Selection. Spain hosts Barcelona robotics-platform development and an AI inspection development site.

Evidence scope. Barcelona robot engineering, manufacturing robot demand, customer integration and shared European testing resources.

Sources: country:18:S1 · country:18:S2 · country:18:S3 · country:18:S4 · country:18:S5 · country:18:S6

19 Norway [country:19]

National industrialization assessment

Selection. Norway's robotics development brings intelligence, actuators, assembly and testing together at the Moss facility.

Evidence scope. Quarry operation, training and developing robot manufacture. Planned facilities retain their announced stage; US activities retain separate regional attribution.

Sources: country:19:S1 · country:19:S2 · country:19:S3

20 United Arab Emirates [country:20]

National industrialization assessment

Selection. The UAE brings external autonomous-driving technology into local transport services. Dubai passenger-operation records support its adoption and operations role.

Evidence scope. Reported passenger operations and inspection activity, with completed pilots, contracts and future rollout distinguished by their dates and stages.

Sources: country:20:S1 · country:20:S2 · country:20:S3

Cities & Industrial Clusters - Top 20

Qualitative comparative assessment

01 Pearl River Delta Core — Shenzhen–Dongguan [cluster:01]

Regional industrialization cluster

Selection. Shenzhen and Dongguan connect sensor and robot development with engineering education, prototyping facilities and manufacturing access. XbotPark's university and startup programmes link talent development to product engineering.

Evidence scope. Located development and incubation in Shenzhen and Dongguan; named XbotPark startup outcomes and HKUST's April 2026 educational visit. Shenzhen's 2024 academy incubation total covers hardware entrepreneurship. Overseas customers and Hong Kong educational origins retain their locations.

Sources: cluster:01:S1 · cluster:01:S2 · cluster:01:S3 · cluster:01:S4 · cluster:01:S5 · cluster:01:S6 · cluster:01:S7 · cluster:01:S8 · cluster:01:S9

02 San Francisco Bay Area [cluster:02]

Regional industrialization cluster

Selection. The Bay Area combines model and robotics-platform development with Berkeley's robot-learning education and Stanford's shared physical research facilities. Reusable software and product companies connect research to physical systems.

Evidence scope. Development across San Francisco, San Mateo, Santa Clara and Alameda counties; Berkeley's Spring 2026 course and Stanford Robotics Center's physical research bays. Global platform adoption and site-specific operations retain separate geographic scopes.

Sources: cluster:02:S1 · cluster:02:S2 · cluster:02:S3 · cluster:02:S4 · cluster:02:S5 · cluster:02:S6

03 Yangtze River Delta Core — Shanghai–Hangzhou–Suzhou [cluster:03]

Regional industrialization cluster

Selection. The cluster brings Shanghai's training infrastructure and Hangzhou's robots and physical-system research into one analytical region, tracing research into product development.

Evidence scope. The analytical region covers Shanghai, Hangzhou and Suzhou. Cited robot manufacture, R&D, training and product development are located in Shanghai and Hangzhou; customer sites retain their locations.

Sources: cluster:03:S1 · cluster:03:S2 · cluster:03:S3 · cluster:03:S4 · cluster:03:S5 · cluster:03:S6

04 Beijing Region [cluster:04]

Regional industrialization cluster

Selection. Beijing brings robot-learning resources, developers, district-level driving trials and growth funding into the same regional network.

Evidence scope. Located developers, research, driving and delivery activity in Beijing municipality, with operating supervision and external customer locations separately recorded.

Sources: cluster:04:S1 · cluster:04:S2 · cluster:04:S3

05 Seoul Capital Area [cluster:05]

Regional industrialization cluster

Selection. The Seoul Capital Area connects research and manufacturing demand with internal building deliveries and capital-market access.

Evidence scope. Seoul, Incheon and Gyeonggi research and development; distinct activities at NAVER 1784 in Seongnam, ROBOTIS in Magok and Doosan in Suwon.

Sources: cluster:05:S1 · cluster:05:S2 · cluster:05:S3 · cluster:05:S4

06 Boston Region [cluster:06]

Regional industrialization cluster

Selection. Greater Boston combines robot research, hardware companies and shared experimental space, with documented links to customer logistics.

Evidence scope. Greater Boston product development, research and shared experimentation linked to external customer operations; customer sites retain their locations.

Sources: cluster:06:S1 · cluster:06:S2

07 Pittsburgh Region [cluster:07]

Regional industrialization cluster

Selection. Pittsburgh translates research into company technology transfer and manufacturing demonstrations.

Evidence scope. Pittsburgh and Allegheny County research, industrial product development, customer-pilot connections and shared manufacturing resources.

Sources: cluster:07:S1 · cluster:07:S2

08 Munich Region [cluster:08]

Regional industrialization cluster

Selection. Munich's robotics integration companies develop business around industrial customer logistics and growth financing.

Evidence scope. Munich city and Landkreis product, integration, research and financing activity; customer plants outside the region retain their locations.

Sources: cluster:08:S1 · cluster:08:S2

09 Tokyo–Yokohama Core [cluster:09]

Regional industrialization cluster

Selection. The Tokyo-centered region brings control and robotics companies together with capital and testing access.

Evidence scope. Tokyo-centered control, integration and research within the Tokyo-Yokohama-Kawasaki analytical region. Manufacturing and customer events retain their documented city locations.

Sources: cluster:09:S1 · cluster:09:S2 · cluster:09:S3 · cluster:09:S4

10 Stuttgart Region [cluster:10]

Regional industrialization cluster

Selection. Stuttgart brings manufacturing and logistics customers together with AI manipulation and automotive testing requirements.

Evidence scope. Region Stuttgart development and shared industrial testing, including Fraunhofer IPA, University of Stuttgart and ARENA2036 facilities; partner facilities retain their own locations.

Sources: cluster:10:S1 · cluster:10:S2 · cluster:10:S3

11 Zurich Region [cluster:11]

Regional industrialization cluster

Selection. Zurich's product-development network includes learned control for industrial inspection robots and customer workflows.

Evidence scope. Located product development and research-commercialization links, with external inspection sites separately attributed.

Sources: cluster:11:S1

12 Singapore [cluster:12]

Regional industrialization cluster

Selection. Singapore integrates foreign robots into customer infrastructure, with local inspection and operating responsibility.

Evidence scope. Located tunnel and retail integration, operator training and research resources; shared country and cluster events are cross-referenced.

Sources: cluster:12:S1 · cluster:12:S2

13 Odense [cluster:13]

Regional industrialization cluster

Selection. Odense provides shared supply and development sites for mobile and collaborative robots.

Evidence scope. UR-MiR development infrastructure and DTI equipment, mentoring and incubation in Odense. National industry totals and customer operations retain separate scopes.

Sources: cluster:13:S1 · cluster:13:S2

14 Seattle Region [cluster:14]

Regional industrialization cluster

Selection. Seattle's corporate and development network includes large logistics adopters and robot operating-data tools.

Evidence scope. Located drone engineering and manufacture, robot-data work and university research. BRINC's human-piloted missions and Amazon's external operating sites retain their respective attribution.

Sources: cluster:14:S1 · cluster:14:S2 · cluster:14:S3 · cluster:14:S4 · cluster:14:S5

15 Aichi Manufacturing Region [cluster:15]

Regional industrialization cluster

Selection. Aichi provides robot testing and support facilities serving manufacturing development.

Evidence scope. DENSO WAVE development and manufacture in Agui; Toyota City research and technology transfer. Toyota Motor East Japan customer production retains its external location.

Sources: cluster:15:S1 · cluster:15:S2 · cluster:15:S3

16 London Core — Cambridge Research and Startup Lineage [cluster:16]

Regional industrialization cluster

Selection. London develops action models, robot learning and vehicle systems toward physical products, with Cambridge represented through its research and founding lineage.

Evidence scope. Greater London development and supervised driving trials; joint dexterity research, reusable tools and completed financing. Cambridge retains its distinct lineage role.

Sources: cluster:16:S1 · cluster:16:S2 · cluster:16:S3

17 Waterloo Core [cluster:17]

Regional industrialization cluster

Selection. The Waterloo core brings industrial AMR products into large-scale automation integration and services.

Evidence scope. Kitchener-Waterloo-Cambridge supplier and research ecosystem, including ATS, OTTO, Avidbots, Deep Trekker, RoboHub and SMART Centre.

Sources: cluster:17:S1 · cluster:17:S2

18 Daejeon Core — Sejong–Osong Transport Links [cluster:18]

Regional industrialization cluster

Selection. Daejeon combines research platforms, technology transfer and robot startups with a physical AI demonstration lab.

Evidence scope. Located KAIST and ETRI research, planning and fleet-management transfer. Sejong and Osong retain their transport-link roles and site-specific attribution.

Sources: cluster:18:S1 · cluster:18:S2 · cluster:18:S3 · cluster:18:S4

19 Pohang Industrial Robotics and Manufacturing Research Region [cluster:19]

Regional industrialization cluster

Selection. Pohang brings a robotics-company site together with a steel customer's joint laboratory for manufacturing-oriented development.

Evidence scope. January 2026 photographed factory visit: Indy and OPTi assembly, actuator and motor production, calibration, aging and precision checks. Located learning-data hardware development and POSTECH research remain separately staged.

Sources: cluster:19:S1 · cluster:19:S2 · cluster:19:S3 · cluster:19:S4

20 Austin Region [cluster:20]

Regional industrialization cluster

Selection. Austin-based Apptronik develops Apollo through Mercedes customer trials and growth financing. The customer trials took place in Germany.

Evidence scope. Austin MSA robot development and completed financing linked to Apptronik's Mercedes customer trials in Germany; training and production operation retain their distinct stages.

Sources: cluster:20:S1 · cluster:20:S2

Current 100

Section headings define membership; C/N IDs are persistent source identifiers.

42dot [C001]

Ride requests and reservations

Selection. TAP handles ride requests and reservations for the Cheonggyecheon autonomous bus. Government service records describe its platform role alongside 42dot's technical materials.

Evidence scope. 2022–2024 TAP service records and platform role; current model technology is documented separately.

Sources: C001:S1 · C001:S2 · C001:S3

AgiBot [C002]

Production-line robot deployment

Selection. AgiBot G2 was deployed on Longcheer's tablet production line, as described in the customer's account of its production process.

Evidence scope. Customer and supplier announcements; operating figures are company-reported, and the Q3 figure of 100 robots is a plan.

Sources: C002:S1 · C002:S2

Agile Robots [C003]

Logistics automation integration

Selection. Agile Robots brought idealworks into its group through an acquisition, combining robotics development with BMW logistics automation.

Evidence scope. Acquisition announcement and BMW logistics application records; subsidiary contributions are recorded at group level.

Sources: C003:S1 · C003:S2

Agility Robotics [C004]

Tote transfers

Selection. Digit transfers totes to a conveyor at GXO's SPANX distribution center. GXO announced the deployment and a multiyear service agreement in 2024.

Evidence scope. GXO customer announcement, June 2024: task, deployment and RaaS contract; the robot version in photographs requires separate identification.

Sources: C004:S1 · C004:S2 · C004:S3 · C004:S4

AIDIN Robotics [N099]

Force-sensing components

Selection. AIDIN supplies AFT200 force/torque sensing used in demonstration capture and physical Franka manipulation research.

Evidence scope. ManipForce v1, III-A and IV-A.2: sensor integration in capture and physical robot execution.

Sources: N099:S1 · N099:S2

Amazon [C005]

Fulfillment adoption

Selection. Amazon deploys, tests and expands robotics within its order-fulfillment operations, acting as the customer responsible for logistics tasks.

Evidence scope. Amazon's account of deployment in operations facilities; company financials cover the whole business.

Sources: C005:S1

Ambi Robotics [C006]

Logistics sorting

Selection. AmbiSort applies Sim2Real technology to logistics sorting. Pitney Bowes describes using the system in customer statements published with the product materials.

Evidence scope. AmbiSort product documentation and supplier-published Pitney Bowes statements cover existing use and expansion contracts.

Sources: C006:S1

AMP Robotics / AMP [C007]

Material sorting

Selection. AMP installed and operated neural-network-based material sorting at the Portsmouth facility. Its facility case includes a customer manager's account of the work.

Evidence scope. Supplier facility case and 2025 acquisition announcement; facility throughput and robot-arm performance have distinct scopes.

Sources: C007:S1 · C007:S2

ANYbotics [Coo8]

Industrial inspection

Selection. ANYmal applies learned control to industrial inspection. ANYbotics describes customer operations using the robots.

Evidence scope. Company account of industrial inspection operations; customer counts, reliability and payback figures are company-reported.

Sources: C008:S1

Applied Intuition [Co09]

Vehicle simulation and testing

Selection. Applied Intuition supplies vehicle simulation and testing software. TRATON confirms their existing collaboration on development tools.

Evidence scope. TRATON customer announcement covering five years of tool collaboration; deployment of the new vehicle OS is planned.

Sources: C009:S1

Autonomous a2z [Co10]

Supervised passenger shuttle

Selection. Autonomous a2z's ROii carried passengers on the Cheonggye AO1 shuttle. Seoul's trial-service notice and a passenger account describe supervised operation.

Evidence scope. Seoul trial-service notice and passenger observations; an onboard supervisor can intervene manually.

Sources: C010:S1 · C010:S2 · C010:S3 · C010:S4

Baidu [Co11]

Driverless passenger service

Selection. Baidu reports driverless ride activity through Apollo Go. Its contribution is autonomous passenger-service operation.

Evidence scope. Issuer operating disclosures; ride counts have a different scope from paid orders, revenue and profitability.

Sources: C011:S1

Bedrock Robotics [C012]

Autonomous excavation

Selection. Bedrock retrofits excavators for autonomous digging at named infrastructure customers including Sundt. Its announcement describes sensing, learned models and operation beyond the supervised trial stage.

Evidence scope. Bedrock's deployment announcement describes autonomous digging within supervisor-defined work plans and permitted areas.

Sources: C012:S1

Berkshire Grey [C013]

Parcel sorting

Selection. Berkshire Grey supplies RPSi parcel sorting at FedEx facilities. FedEx describes existing installations and everyday sorting work.

Evidence scope. FedEx's 2022 installation account; later purchase plans and warrant conditions are separate events.

Sources: C013:S1

BlackRock [C101]

Robotics investment funds

Selection. BlackRock operates RBOT as an investment route into listed robotics and automation companies.

Evidence scope. RBOT fund operation, portfolio holdings and assets under management.

Sources: C101:S1

Booster Robotics [C015]

Research and competition robots

Selection. Booster supplies K1 and T1 robots used by the HTWK team in research and RoboCup. Team documents describe competition operation and a learned kick executed on T1.

Evidence scope. Team documents and joint research; team learning and firmware contributions retain their own attribution.

Sources: C015:S1 · C015:S2 · C015:S3

Boston Dynamics [Co16]

Trailer unloading

Selection. Boston Dynamics supplies robots for commercial trailer unloading at customer sites.

Evidence scope. Customer unloading records; the additional commitment of more than 1,000 robots is an MOU, while Atlas development is a separate activity.

Sources: C016:S1

Brain Corp [Co17]

Cleaning autonomy

Selection. Brain Corp provides route-learning autonomy for cleaning machines used at Walmart.

Evidence scope. Existing customer-use records; the figure of 360 additional machines was a deployment plan.

Sources: C017:S1

Built Robotics [Co18]

Autonomous solar construction

Selection. Built Robotics completed autonomous solar pile installation with its Gen1 system at a named EPC site.

Evidence scope. Project report published through a public agency; evidence concerns the Gen1 deployment and its defined construction task.

Sources: C018:S1 · C018:S2 · C018:S3

Burro [Co19]

Farm transport

Selection. Burro provides autonomous transport at Sierra Gold. A named operations manager describes workers using the robots in nursery tasks.

Evidence scope. Burro publishes Sierra Gold's account of workers using the robots for nursery transport.

Sources: C019:S1 · C019:S2 · C019:S3

Carbon Robotics [Co20]

Laser weeding

Selection. Carbon Robotics uses plant recognition to guide LaserWeeder’s laser weeding. Named farms describe using the equipment.

Evidence scope. Supplier-published customer testimony; savings and yield effects lack independent verification.

Sources: C020:S1 · C020:S2

CATL [Co21]

Manufacturing adoption and batteries

Selection. CATL describes deploying Galbot S1 on module and battery-pack production lines. Its contribution combines customer adoption with battery supply for robotics.

Evidence scope. CATL's announcement describes the system and reports eight-hour operation and battery failure specifications.

Sources: C021:S1

Cognex [Co22]

Industrial inspection vision

Selection. Cognex supplies neural-network-based vision for industrial inspection. Its filings document a perception role within production processes.

Evidence scope. Industrial-vision filings. Financial figures cover consolidated GAAP results for FY2025, ending 2025-12-31, in USD millions; machine vision includes rule-based systems and barcode products.

Sources: C022:S1 · C022:S2 · C022:S3

Corvus Robotics [Co23]

Inventory drones

Selection. Corvus supplies inventory drones used at multiple MSI Surfaces warehouse sites.

Evidence scope. Supplier account of named-customer use; accuracy and return-on-investment claims are company-reported. MSI Surfaces is the customer.

Sources: C023:S1

Coupang [Co24]

Fulfillment operations

Selection. Coupang uses people and robots together in fulfillment operations. It represents the customer's role in deploying automation for order handling.

Evidence scope. Operator accounts; overall infrastructure investment has a wider scope than robot purchases, and time-saving figures are party-reported.

Sources: C024:S1

Covariant [Co25]

Learned picking

Selection. Covariant Brain supports everyday learned picking and sorting at Radial's TradePort2 facility in Louisville.

Evidence scope. Radial's 2023 customer announcement; throughput and SKU coverage are customer-reported, while later expansion plans are separate.

Sources: C025:S1 · C025:S2 · C025:S3

DeepRobotics [Co26]

Tunnel inspection hardware

Selection. DEEP Robotics provides the X30 platform behind SPock power-tunnel patrols. SP Group's operating account and the integrator's hardware description identify the customer task and platform.

Evidence scope. Customer patrol records and integrator description; feature versions are specific to each deployment.

Sources: C026:S1 · C026:S2 · C026:S3 · C026:S4

Dexterity [Co29]

Trailer loading

Selection. Dexterity supplies trailer-loading robotics at FedEx's Hagerstown hub. The customer describes deployment beyond a pilot.

Evidence scope. Joint customer announcement documenting the loading application.

Sources: C029:S1

Diligent Robotics [C030]

Hospital deliveries

Selection. Diligent Robotics' Moxi handles hospital deliveries. CHLA documents repeated deliveries and use by its hospital teams.

Evidence scope. Hospital-use records and supplier material; deliveries support hospital logistics. Serve's separate delivery business retains separate attribution.

Sources: C030:S1 · C030:S2

DJI [C104]

Aerial infrastructure-inspection supply

Selection. DJI supplies drones used in China Southern Power Grid's route-based inspection. Its later Dock workflow account documents further vendor-reported inspection use in oil and gas.

Evidence scope. DJI's named powerline-inspection case dated 2019-05-08; Dock 3 release dated 2025-02-27; unnamed oil/gas operator workflow account dated 2026-02-20, with some AI integrations at experimental stage.

Sources: C104:S1 · C104:S2 · C104:S3

Doosan Robotics [C105]

Supplied manipulation research platform

Selection. An external Royal IHC project team used Doosan's 1013 arm in a vision-guided welding prototype. Doosan supplied the manipulation platform; the team developed the vision, integration and welding application.

Evidence scope. Smart Manufacturing & Robotics Delft project account published 2025-03-16, covering fall 2023; Doosan 1013, RealSense D415, OpenCV detection and TCP motion commands in a constrained welding prototype.

Sources: C105:S1

Dreame Technology [C032]

Home-cleaning perception

Selection. Dreame X40 Master performs navigation, obstacle recognition and floor cleaning in a hands-on review that also records recognition errors.

Evidence scope. Affiliate-linked product test; Master-specific observations are retained, and borrowed Ultra Complete measurements have separate scope.

Sources: C032:S1 · C032:S2 · C032:S3

Dyna Robotics [Co33]

Garment folding

Selection. Dyna Robotics applies robot learning to garment folding at Monster Laundry. The owner describes daily folding work.

Evidence scope. Customer quotation; people load and collect garments. Inconsistent time and quantity statements are excluded from performance claims.

Sources: C033:S1 · C033:S2

Ecovacs [Co34]

Home cleaning

Selection. Ecovacs DEEBOT OZMO T8 AIVI was used in a direct test covering vacuuming, navigation and camera sensing.

Evidence scope. RTINGS hands-on test of the base T8 AIVI; mopping was untested in that account, and long-term customer statistics are unavailable.

Sources: C034:S1 · C034:S2 · C034:S3

Elephant Robotics [No17]

Educational robot kits

Selection. Elephant Robotics supplies arms and AI kits used in named university teaching and physical student projects.

Evidence scope. Undated supplier university cases documenting adopted educational platforms and student-developed tasks.

Sources: N017:S1 · N017:S2 · N017:S3

Farm-ng [No20]

Agricultural development platforms

Selection. Farm-ng supplies Amiga as an adopted agricultural education platform in the recurring Farm Robotics Challenge, including CMU's seedling-planting project; university teams retain attachments and task development.

Evidence scope. UC ANR account, 2025-05-08: third annual Farm Robotics Challenge, Amiga educational-platform use and CMU's physical seedling-planting project.

Sources: N020:S1 · N020:S2 · N020:S3 · N020:S4

Field AI [Co35]

Construction inspection autonomy

Selection. Field AI provides autonomy for Spot-based inspection at changing construction sites. Its account describes perception, mapping and use by site managers.

Evidence scope. Field AI describes a deployment at an unnamed construction customer, covering perception, mapping and inspection.

Sources: C035:S1 · C035:S2

Figure AI [Co36]

Humanoid factory pilot

Selection. Figure 02 handled sheet-metal parts during BMW's extended Spartanburg production pilot.

Evidence scope. BMW report, 2026-02-27, pp. 4-5: ten-month pilot with weekday production shifts.

Sources: C036:S1 · C036:S2

Flexiv [Co37]

Force-controlled food processing

Selection. Flexiv's delivered Rizon 4 solution locates fish fillets on a moving conveyor and shapes them using force control.

Evidence scope. Supplier case for a specific delivered application; the customer is unnamed and independent acceptance and performance tests are unavailable.

Sources: C037:S1 · C037:S2 · C037:S3

Formic [Co38]

Packaging and palletizing services

Selection. Formic supplies vision-based packaging and palletizing as a service. Its product account includes customers describing active production use.

Evidence scope. Supplier-published customer statements; installed software versions, uptime and commercial terms require deployment-specific evidence.

Sources: C038:S1

ForwardX Robotics [Co39]

Warehouse picking assistance

Selection. ForwardX Flex assists picking in Li & Fung's IKEA e-commerce warehouse. Its product materials describe visual perception and movement responses.

Evidence scope. Supplier customer case and product-family technical material; performance and feature versions are supplier-reported.

Sources: C039:S1 · C039:S2

Foxglove [Co40]

Robot-log analysis

Selection. Foxglove provides development and operating-log tools used by Square Robot for field analysis.

Evidence scope. Named-customer tool-use record; the contribution concerns software analysis, while the customer retains responsibility for robot operations.

Sources: C040:S1

Galbot [Co41]

Production-line robot supply

Selection. Galbot S1 works on CATL module and battery-pack lines. CATL describes deployment, visual positioning and obstacle avoidance.

Evidence scope. CATL customer announcement; evidence concerns S1 production-line use, with future staffing and service-standard plans recorded separately.

Sources: C041:S1 · C041:S2 · C041:S3

Gaussian Robotics / Gausium [Co43]

Store cleaning

Selection. Gausium supplies cleaning robots adopted at named ELVI stores.

Evidence scope. Customer article republished by the supplier; subsequent investment is recorded as planned.

Sources: C043:S1 · C043:S2

Geek+ [Co45]

Warehouse transport

Selection. Geek+ provides warehouse movement within projects documented by implementation participants. People retain the picking role in the integrated workflow.

Evidence scope. Implementation participants describe the warehouse project and the division between robot movement and human picking.

Sources: C045:S1

GelSight [Co46]

Tactile research instrumentation

Selection. GelSight supplies the Mini sensor used by Politecnico di Milano researchers to acquire tactile measurements on industrial components with a FANUC collaborative robot. The researchers retain the anomaly-detection methods and evaluation.

Evidence scope. Research v1, 2026-08-31, sections 3.3 and 4: adopted Mini instrumentation for robot-mounted dataset acquisition and external inspection-method comparison.

Sources: C046:S1 · C046:S2 · C046:S3 · C046:S4

GXO [Co47]

Customer logistics integration

Selection. GXO operates Digit at its SPANX site, integrating tote transfers with existing mobile robots and conveyors under a multiyear RaaS agreement.

Evidence scope. GXO customer announcement; contract price, cash flows, residual value and measured uptime are undisclosed in the record.

Sources: C047:S1

HAI Robotics [Co48]

Warehouse robot systems

Selection. HAI Robotics supplies ACR and AMR warehouse systems, including a Hyundai Mobis application.

Evidence scope. Hai Robotics' Hyundai Mobis case describes tote retrieval and parts transport at the Suwon High Tech Center's spare-parts warehouse. Picking workstations retain the human picking step. This record recognizes the warehouse-system contribution described in that case.

Sources: C048:S1 · C048:S2

HaptX [N030]

Tactile teleoperation

Selection. HaptX supplies tactile gloves adopted in Sanctuary's development workflow, providing human teleoperation input.

Evidence scope. Sanctuary customer account and HaptX robotics cases, undated: gloves used in the customer's pilot-rig teleoperation workflow; autonomous robot tasks remain development.

Sources: N030:S1 · N030:S2 · N030:S3 · N030:S4 · N030:S5

Hesai [C049]

LiDAR components

Selection. Hesai's Pandar sensors are used on WeRide vehicles. Supplier materials include the customer's account of sensor adoption.

Evidence scope. Supplier-published customer statement; evidence identifies a sensing component within the vehicle system.

Sources: C049:S1 · C049:S2

Horizon Robotics [C050]

Driver-assistance computing

Selection. Horizon Robotics supplies Journey6M computing for NOA features in delivered customer vehicles.

Evidence scope. Driver-assistance supply records; Journey 6M delivery and the planned 6H deployment retain their distinct product stages.

Sources: C050:S1

Hyundai Motor Group [C051]

Strategic robotics ownership

Selection. Hyundai Motor Group completed its controlling investment in Boston Dynamics in 2021. The joint announcement recorded an 80% group stake at closing.

Evidence scope. 2021 transaction announcement; the stake belongs to the group-level transaction, and current ownership requires separate evidence.

Sources: C051:S1 · C051:S2 · C051:S3

InOrbit [Co52]

Robot operations tools

Selection. InOrbit supports monitoring and remote exception management for Kärcher KIRA B50 cleaning robots.

Evidence scope. Customer statement and RobOps case; operations include remote support, with autonomy and certification assessed at the robot-system level.

Sources: C052:S1 · C052:S2

Intuitive Surgical [Co53]

Robotic bronchoscopy assistance

Selection. Intuitive Surgical's Ion supports shape-sensing catheter manipulation for bronchoscopy and biopsy. North Tees describes trial adoption and actual biopsies in 2025.

Evidence scope. Hospital account documenting physician-assisted use of the specified system version in the reported cases.

Sources: C053:S1 · C053:S2 · C053:S3 · C053:S4

JLG — Canvas Robotics [No37]

Construction robotics technology transfer

Selection. JLG acquired Canvas core technology and integrated its team, carrying forward construction-robotics capabilities through a completed technology transfer.

Evidence scope. JLG January 2026 announcement: technology acquisition and team integration; further integrated solutions are planned.

Sources: N037:S1 · N037:S2

John Deere [Co54]

Selective spraying

Selection. John Deere's See & Spray recognizes plants and applies selective spraying in customer fields. Its commercial approach includes performance-linked charging.

Evidence scope. Supplier savings claims and sponsored research; evidence is specific to the cited fields and billing arrangement.

Sources: C054:S1

Keenon Robotics [Co55]

Restaurant and hotel service robots

Selection. Keenon’s DINERBOT and cleaning systems perform transport and service tasks at named restaurants and hotels, with staff handoffs and obstacle avoidance.

Evidence scope. Supplier-published customer statements; newer humanoid demonstrations are separate development records.

Sources: C055:S1

Kodiak Robotics / Kodiak AI [Co57]

Off-road transport

Selection. Kodiak supplies customer-owned trucks for limited off-road transport at Atlas.

Evidence scope. Supplier delivery and transport reports; evidence covers the off-road domain and its stated operating scope.

Sources: C057:S1

Locus Robotics [Co58]

Picking assistance

Selection. Locus robots assist human picking across multiple customer sites with repeated tasks.

Evidence scope. Customer-use records; cumulative task totals have a different scope from profitability, failure rates and unattended operation.

Sources: C058:S1

Meituan [Co61]

Autonomous delivery operations

Selection. Meituan operates drone and ground delivery systems. Its technical account connects sensing and autonomous movement with actual delivery orders.

Evidence scope. Company operating totals; drone and ground-vehicle periods and denominators remain separate.

Sources: C061:S1

Mobile Industrial Robots / MiR [Co62]

AMR container transport

Selection. MiR250 transports KLT containers at BORG Automotive, with MES completion confirmation. Customer and integrator statements describe the workflow.

Evidence scope. Supplier-published interviews; MiR hardware, Octant integration and customer picking retain separate contributions.

Sources: C062:S1

Momenta [Co63]

Production driving intelligence

Selection. Momenta supplies driving intelligence for named production customers including SAIC IM and Lynk.

Evidence scope. Production-customer records covering L2 to L2++ functions; planned L3 and L4 functions are separate.

Sources: C063:S1 · C063:S2

Mytra [Co64]

Inventory buffering and sequencing

Selection. Mytra supports inventory buffering and sequencing before shipment at selected Albertsons distribution centers.

Evidence scope. Mytra publishes Albertsons staff statements about inventory buffering and sequencing at selected distribution centers.

Sources: C064:S1 · C064:S2 · C064:S3 · C064:S4

NAVER / NAVER LABS [Co65]

Building-integrated robot operations

Selection. NAVER and NAVER LABS operate repeated internal deliveries at 1784, integrating robots with the building and elevators.

Evidence scope. Internal customer-operation records; the parent and development subsidiary share one activity record, with external sales assessed separately.

Sources: C065:S1

Nearthlab [Co66]

Wind-turbine inspection

Selection. Nearthlab's NearthWind performs autonomous wind-turbine blade inspection. Its materials describe sensing, flight and inspection contracts with Siemens Gamesa, Vestas and GE.

Evidence scope. Supplier contract history and cumulative totals; inspection volumes and safety records are company-reported.

Sources: C066:S1

Nimble Robotics [N053]

Robotic fulfillment supply

Selection. Nimble supplies robotic fulfillment used by named brands for picking, packing and shipping; later alliance plans extend that operating contribution.

Evidence scope. Supplier customer cases including Fresh Clean Threads' 2023 fulfillment; FedEx alliance announcement, 2024-09-05.

Sources: N053:S1 · N053:S2

NVIDIA [Co67]

Robotics development infrastructure

Selection. NVIDIA's Isaac Sim, Isaac Lab and GROOT support robot simulation, learning and deployment. Its May 2025 announcement names platform users including Agility, Boston Dynamics and Galbot.

Evidence scope. Platform-use announcement; financial figures are company-wide consolidated GAAP for FY2026 ending 2026-01-25, in USD millions. The release tables are marked unaudited; user-site effects require user-specific evidence.

Sources: C067:S1 · C067:S2 · C067:S3 · C067:S4 · C067:S5

Orbbec [Co68]

Depth sensing

Selection. Orbbec's Gemini 336L supplies RGB and depth streams for Quasi Model C2. A customer engineer describes SDK integration into Q.AI.

Evidence scope. Supplier-published customer statement; sensor supply and Quasi's mapping, planning and control retain separate attribution.

Sources: C068:S1

OrionStar [Co69]

Factory process transport

Selection. OrionStar CarryBot transports materials between processes at a Yanai Denki factory in Japan.

Evidence scope. 2025 company-republished newspaper account of deployment; newspaper text and fleet-wide outcomes lack separate verification.

Sources: C069:S1 · C069:S2 · C069:S3 · C069:S4

OSARO [Co70]

Learned packaging

Selection. OSARO provides learned vision and control for Zenni packaging, with later records describing transition into production.

Evidence scope. OSARO's records distinguish the 2022 packaging plan from the subsequent production transition at Zenni.

Sources: C070:S1 · C070:S2 · C070:S3

Parallel Domain [Co71]

Synthetic perception data

Selection. Parallel Domain supplies synthetic perception-training data used by named organizations including Google, Woven and Toyota Research Institute.

Evidence scope. Supplier customer-use claims; cited abstracts provide limited independent attribution of the particular dataset.

Sources: C071:S1 · C071:S2 · C071:S3

Path Robotics [Co72]

Robotic welding

Selection. Path Robotics supplies a welding cell used by Millerbernd to fabricate transport and infrastructure poles. The case includes a welder describing the work.

Evidence scope. Supplier case and worker quotation describing the welding application.

Sources: C072:S1 · C072:S2 · C072:S3 · C072:S4

Pickle Robot [Co73]

Trailer unloading

Selection. Pickle Robot unloads UPS trailers using motion and path selection in actual handling work.

Evidence scope. Supplier-published customer quotation; the cited 90-minute task is distinct from a shift-average measure.

Sources: C073:S1

Plus One Robotics [Co74]

Parcel vision and exception handling

Selection. Plus One's PickOne provides vision recognition for FedEx parcel sorting, while Yonder supports remote exception handling.

Evidence scope. The FedEx site record describes Plus One's vision and remote exception handling alongside Yaskawa's arm, gripper and integration.

Sources: C074:S1 · C074:S2

Pudu Robotics [Co75]

Office cleaning

Selection. PUDU CC1 Pro cleans carpets and floors in shared areas of a Walmart US office facility, using navigation and path planning.

Evidence scope. Supplier case covering office common areas; publication date and independent labor-saving logs are unavailable.

Sources: C075:S1 · C075:S2 · C075:S3 · C075:S4

Quicktron [Co76]

Warehouse shelf transport

Selection. Quicktron M-Series moves shelves in Coupang's goods-to-person workflow. RCS and higher-level systems allocate warehouse tasks.

Evidence scope. Supplier case; people perform final picking, and fleet counts and efficiency figures are company-reported.

Sources: C076:S1 · C076:S2 · C076:S3

RightHand Robotics [Co78]

Warehouse picking

Selection. RightPick performs picking at apo.com and PALTAC. Named customer statements describe operating use and learning features.

Evidence scope. Supplier-published statements; storage and transport by AutoStore or Murata have separate roles, while order totals cover the wider workflow.

Sources: C078:S1 · C078:S2

Roborock [Co79]

Object pickup and cleaning

Selection. Roborock Saros Z70 recognizes and picks up a limited range of objects while cleaning. A purchaser's test records both use and failures.

Evidence scope. Qualitative hands-on review; observations include automatic and manual operation, with no formal success-rate measurement.

Sources: C079:S1 · C079:S2 · C079:S3

ROBOTIS [Co80]

Research actuators and platforms

Selection. ROBOTIS supplies actuators and physical platforms used in research and education, including dual-arm learning work.

Evidence scope. Supplier index and user research paper; evidence covers component use in research, with commercial returns assessed separately.

Sources: C080:S1 · C080:S2 · C080:S3

Roboto AI [Co81]

Robot operations analysis

Selection. Roboto AI supports post-flight QA for BRINC and robot-fault analysis for ANYbotics. Named customer staff describe using the tools.

Evidence scope. Supplier-published customer statements; time-saving claims lack independent audit, and the contribution concerns data analysis.

Sources: C081:S1

Robust.AI [Co82]

Collaborative tote transport

Selection. Robust.AI's Carter transports totes and assists picking at Saddle Creek's Charlotte site. A named operations manager describes its use.

Evidence scope. Supplier-published customer statements; announced charging policies and productivity claims have separate financial and measurement scopes.

Sources: C082:S1 · C082:S2 · C082:S3

Rockwell Automation [Co83]

MES and AMR integration

Selection. Rockwell integrates MES with OTTO transport at its Twinsburg factory, dispatching moves from production orders.

Evidence scope. Internal factory-use case; dispatch is rule-based, and cost-recovery figures are company calculations.

Sources: C083:S1

Saildrone [Co84]

Ocean observation

Selection. Saildrone performs repeated ocean-observation missions for NOAA, transmitting measurements used in public scientific datasets.

Evidence scope. NOAA multi-year mission records; navigation autonomy operates with a defined supervision scope, while scientific analysis has separate attribution.

Sources: C084:S1 · C084:S2

Samsung Electronics [Co85]

Strategic robotics ownership

Selection. Samsung's filings document acquisition of control over Rainbow Robotics and its consolidation into the group.

Evidence scope. Financial filings on strategic ownership; payments for existing shares are distinct from new cash raised by Rainbow.

Sources: C085:S1

Sarcos / Palladyne AI [Co86]

Maintenance automation software

Selection. Palladyne AI supplies learned software for automated surface preparation at Warner Robins. A named customer describes completion of the first contract phase.

Evidence scope. Supplier-published customer statement; the second phase was planned, and the four-year contract amount is distinct from cash received.

Sources: C086:S1 · C086:S2

Seoul Robotics [Co87]

Factory vehicle perception

Selection. Seoul Robotics supplies external perception for vehicle movement inside a BMW factory.

Evidence scope. BMW customer material; partner systems handle driving plans, steering and braking within the factory domain.

Sources: C087:S1 · C087:S2

Shadow Robot [No72]

Dexterous research-hand supply

Selection. Shadow Robot co-developed DEX-EE hardware with DeepMind and supplies the released standard research hand used in DeepMind's DemoStart experiments. Hardware development and supply retain joint credit; DeepMind retains its learning method.

Evidence scope. Shadow account, 2024-06-06: standard build available to the market; DeepMind account, 2024-09-12: adopted DEX-EE hardware in physical manipulation research.

Sources: N072:S1 · N072:S2

SoftBank [Co90]

Warehouse-automation ownership and investment vehicle

Selection. SoftBank completed a secondary Symbolic share purchase and established the GreenBox joint-venture vehicle for warehouse automation.

Evidence scope. Joint announcement, 2023-07-24: completed ownership transaction and established vehicle; initial funding and multiyear purchases are commitments.

Sources: C090:S1

Standard Robots [Co91]

AMR pallet transport

Selection. Standard Robots supplies AMRs used to transport pallets at TRUSCO's Planet Saitama logistics center.

Evidence scope. TRUSCO customer announcement; evidence concerns the deployed transport system, while newer VLA features have separate scope.

Sources: C091:S1 · C091:S2 · C091:S3

Superbin [Co92]

AI recycling collection

Selection. Superbin's Nephron uses AI classification in installed recycling-collection units.

Evidence scope. Installation and maintenance history; repeated references to the same 100-unit event count as one event.

Sources: C092:S1 · C092:S2

Symbotic [Co93]

Logistics automation systems

Selection. Symbotic supplies logistics automation systems documented in filings alongside customer contracts.

Evidence scope. Operating systems and contractual commitments have separate status; the 400-system figure is a conditional purchase commitment.

Sources: C093:S1

Syrius Robotics / Syrius Technology [Co94]

Picking-assistance AMRs

Selection. Syrius provides picking-assistance AMRs through Syrius Japan and ROBOCREW at STOCKCREW. The customer announced completed trials and full deployment beginning in 2022.

Evidence scope. Customer's 2022 announcement; people perform picking. Supplier fleet and five-year contract figures have separate verification status.

Sources: C094:S1 · C094:S2

UBTECH [C103]

Industrial humanoid supply and factory tasks

Selection. UBTECH reports industrial humanoid production and delivery for automotive-factory handling, sorting and inspection. Its selected contribution is the supply of robots for those tasks.

Evidence scope. UBTECH 2025 results filed with HKEX on 2026-03-31, printed pp. 2-4 and 10-11; supplier industrial application page describing named-factory tasks, accessed October 2026.

Sources: C103:S1 · C103:S2

Unitree Robotics [C095]

Physical research platforms

Selection. Unitree supplies physical robots used in external whole-body motion research.

Evidence scope. External research preprint; evidence concerns physical-platform use in research.

Sources: C095:S1

Universal Robots [C096]

Greenhouse harvesting hardware

Selection. Universal Robots supplies UR5e arms used by eternal.ag for greenhouse harvesting. The case includes the customer CTO's account.

Evidence scope. Supplier-published customer case; AI-model development, crop yield and long-term operating economics have distinct attribution.

Sources: C096:S1

Viam [C097]

Fleet operations software

Selection. Viam provides fleet data, status checks and code deployment for Tennibot. Named customer leaders describe practical use.

Evidence scope. Supplier-published customer case; further AI integration was planned, while fleet support capacity differs from actual deployment.

Sources: C097:S1 · C097:S2 · C097:S3

VisionNav Robotics [C098]

Autonomous forklift logistics

Selection. VisionNav VNL16 transports materials through inbound, shelving and outbound workflows for an equipment manufacturer, following scans and RCS instructions.

Evidence scope. VisionNav describes an unnamed manufacturer's inbound, shelving and outbound workflow. Continuous operation is a stated target.

Sources: C098:S1 · C098:S2

Waymo [C102]

Driverless passenger-service operation

Selection. Waymo operates rider-only passenger services across multiple US regions. Its operating disclosure and California deployment-permit record identify autonomous passenger-service operation.

Evidence scope. Waymo operating data through June 2026; CPUC deployment-permit table accessed October 2026; manufacturer recall 25E-034 filed with NHTSA on 2025-05-12.

Sources: C102:S1 · C102:S2 · C102:S3

XYZ Robotics [C099]

Warehouse unloading supply

Selection. XYZ Robotics supplied RockyOne for unloading at Nitori Home Logistics' Satte site, with the supplier reporting stable operational pilots and announcing expansion.

Evidence scope. Supplier account, 2026-02-16: Satte pilots began June 2025; regional expansion is prospective; Japanese distribution begins February 2026.

Sources: C099:S1 · C099:S2 · C099:S3

Zipline [C100]

Autonomous aerial delivery

Selection. Zipline performs paid autonomous aerial deliveries with sensing and flight functions documented in its operating accounts.

Evidence scope. Company reports; delivery counts, item counts and distance use separate units, while future regions and platforms retain planned status.

Sources: C100:S1

Next 100

Section headings define membership; C/N IDs are persistent source identifiers.

1X Technologies [N001]

Whole-body policy learning

Selection. 1X's Redwood describes a policy that learns locomotion and manipulation together. NEO's ordering and support terms provide a separate product-development record.

Evidence scope. Company model and product materials; ordering, planned shipment, delivery and repeated household use are distinct stages, with external voice processing and remote support recorded separately.

Sources: N001:S1 · N001:S2 · N001:S3 · N001:S4 · N001:S5

AeiROBOT [N100]

Research and competition platforms

Selection. AeiROBOT and HERoEHS jointly develop ALICE4 walking and competition vision within their humanoid research programme.

Evidence scope. HERoEHS 2025 team description, pp. 1-2: completed walking/vision work and proposed controller upgrades.

Sources: N100:S1 · N100:S2 · N100:S3 · N100:S4

Aeva [N002]

Industrial sensing

Selection. Aeva's Eve sensing technology is integrated into a SICK sensor product described in a launch announcement.

Evidence scope. Aeva's product announcement describes Eve sensing integrated into a SICK sensor.

Sources: N002:S1 · N002:S2 · N002:S3

Aigen [N003]

Agricultural field trials

Selection. Aigen's Element began use at the named Bowles farm. Customer quotations describe early evaluation in the field.

Evidence scope. Supplier-published customer account of initial trials; operating hours, intervention and herbicide-cost comparisons are company claims.

Sources: N003:S1 · N003:S2

Alibaba [N004]

Robotic perception and action models

Selection. Alibaba's RynnBrain release provides model and code resources, with VLA transfer reported on G1, Atribot and Tianji-Wuji platforms.

Evidence scope. RynnBrain's official repository provides model and code resources, with authors reporting physical tests on specified robots.

Sources: N004:S1

Ambarella [N005]

Robot inference integration development

Selection. Ambarella supplies CV72 inference computing for e-con's ROS 2 rover demonstration of object search, approach, alignment and imaging. The partners' selected robotics integration remains a development contribution.

Evidence scope. e-con engineering account, May 2026: CES 2025 physical rover demonstration using CV72eSOM, ROS 2 and Nav2; perception/navigation integration validation.

Sources: N005:S1 · N005:S2 · N005:S3 · N005:S4

Anthropic [N006]

Language-model control research

Selection. Anthropic tested Claude on robotics control tasks using MuJoCo and LIBERO. Its published research records model calls, simulation conditions and failures.

Evidence scope. Anthropic's published robotics research covers model-driven control in specified simulated tasks, including recorded failures.

Sources: N006:S1

Apple [N007]

Robot interaction and learning data

Selection. Apple's ARMADA research collects manipulation trajectories with AR feedback and replays them on physical robots. ELEGNT adds research on expressive robot movement.

Evidence scope. Joint research involving 15 participants and three ARMADA tasks; evidence covers interaction and data-development experiments.

Sources: N007:S1 · N007:S2

Apptronik [N008]

Humanoid customer trials

Selection. Apptronik develops Apollo for repetitive manufacturing tasks through Mercedes' production-environment data collection and employee teleoperation-based training.

Evidence scope. Mercedes customer account, 2025-03-18: integration testing, training data and autonomous-development step.

Sources: N008:S1 · N008:S2 · N008:S3 · N008:S4 · N008:S5

Atribot [N009]

Manipulation-policy research

Selection. Atribot's Lumo-1 paper describes S1 learning and physical pick-and-place tests.

Evidence scope. The Lumo-1 paper describes S1 learning and its physical pick-and-place test conditions.

Sources: N009:S1 · N009:S2

Autodesk [N010]

Learned assembly

Selection. Autodesk combines planning and reinforcement learning in physical dual-arm assembly research.

Evidence scope. Joint university research reports physical dual-arm assembly; completed steps and completed products use distinct success measures.

Sources: N010:S1

BeingBeyond [N011]

Video-based robot learning

Selection. BeingBeyond trains robot behavior from human video. Being-H0.5 reports tests on five robot platforms, and its repository provides an SO101 deployment procedure.

Evidence scope. Author-reported research and repository documentation; video-derived pseudo-tactile signals and physical tactile measurements have different scopes.

Sources: N011:S1 · N011:S2 · N011:S3

BeyondHoneycomb [No12]

Cooking-state sensing

Selection. BeyondHoneycomb develops cooking systems that use AI and sensors to measure and reproduce cooking states.

Evidence scope. Investor D2SF describes the cooking system’s AI and sensor development. Customer references are anonymous.

Sources: N012:S1 · N012:S2 · N012:S3 · N012:S4 · N012:S5 · N012:S6

bitsensing [No13]

Radar shuttle trials

Selection. bitsensing’s pilot material describes an actual road shuttle at FIX 2025.

Evidence scope. The official pilot account describes a road shuttle at FIX 2025; the 500-vehicle figure is an expansion plan.

Sources: N013:S1 · N013:S2 · N013:S3

Black Sesame [N101]

Robotics compute kits

Selection. Black Sesame reports initial supply of its Aura development kit, extending automotive computing toward robotics development.

Evidence scope. Black Sesame announces initial Aura development-kit supply. The record concerns developer hardware rather than final AUBO customer deployment.

Sources: N101:S1 · N101:S2 · N101:S3

ByteDance [No14]

Robot action-model research

Selection. ByteDance’s GR-2 research combines video pretraining with robot trajectories and manipulation tests.

Evidence scope. Paper abstract and limited affiliation records; reported tests concern research, with the later GR3 page excluded from detailed evidence.

Sources: N014:S1 · N014:S2

Config [No15]

Robot data and task models

Selection. Config publishes HABIT robot observation and action data, supporting its reported CFG-1 learning and physical-task development.

Evidence scope. Company and repository documentation for HABIT and CFG-1. Timing figures are reported by Config.

Sources: N015:S1 · N015:S2 · N015:S3

DEEPX [No16]

Robotics edge computing

Selection. DEEPX develops robotics inference computing with Hyundai Motor Group's Robotics Lab. Hyundai material connects earlier edge-brain work with DAL-e demonstrations, while DX-M2 defines a further development path.

Evidence scope. Joint-development and demonstration records; earlier edge-brain results and DX-M2 completion, production supply and customer revenue have separate status. This is the Korean DEEPX company.

Sources: N016:S1 · N016:S2 · N016:S3

EngineAI [No18]

Learning and deployment tools

Selection. EngineAI publishes PM01 reinforcement-learning training, simulation validation and physical deployment procedures.

Evidence scope. PM01 repository documentation covers training, simulation validation and hardware deployment procedures, using Isaac Lab infrastructure.

Sources: N018:S1 · N018:S2 · N018:S3

Faraday Dynamics [No19]

Robot actuators

Selection. Faraday Dynamics develops Direct Drive and QDD actuator components, with sample fabrication and trial-production history described in an event profile.

Evidence scope. An event profile records the Korean actuator company's sample fabrication and trial-production history.

Sources: N019:S1 · N019:S2

Flexion Robotics [N104]

Whole-body task policies

Selection. Flexion’s June 2026 Reflect v1.0 report describes a humanoid retrieving a parcel, navigating between floors and interacting with doors and elevators. Learned motion policies and whole-body control connect those steps into a research demonstration.

Evidence scope. Company-reported Reflect v1.0 research demonstration, published 29 June 2026; the entry covers the documented missions and controller. Customer acceptance and safety certification are outside this report’s evidence.

Sources: N104:S1

Flexxbotics [N021]

Inspection-to-rework integration

Selection. Flexxbotics describes integration that turns inspection results into robot rework and equipment correction.

Evidence scope. Supplier implementation materials describe statistical process control and machine-learning functions separately.

Sources: N021:S1 · N021:S2

Floatic [N022]

Collaborative picking trials

Selection. Floatic tested collaborative picking with LogisALL at a named location, documenting the robot, software and human work roles.

Evidence scope. Floatic’s company account covers a LogisALL picking proof of concept with specified robots, software and human roles.

Sources: N022:S1 · N022:S2 · N022:S3

Fourier Intelligence [N023]

Robot training and deployment tools

Selection. Fourier publishes GRx code connecting reinforcement-learning training, MuJoCo validation and physical-robot deployment.

Evidence scope. Fourier’s GRx README and code describe a research-platform workflow from training through simulation to hardware deployment.

Sources: N023:S1 · N023:S2

Galaxea AI [No24]

Physical manipulation learning

Selection. Galaxea’s research connects data collection on a specified robot with policy learning and four physical-task evaluations.

Evidence scope. Galaxea’s research team reports policy learning and four physical-task evaluations on specified hardware.

Sources: N024:S1 · N024:S2 · N024:S3

Gecko Robotics [Co44]

Robotic component inspection

Selection. Gecko develops robotic inspection and AI analysis for a new forged-component workflow with BPMI and suppliers.

Evidence scope. Gecko announcement, 2025-07-15: initial component-inspection trials and proposed digital-thread expansion.

Sources: C044:S1

Generalist AI [No25]

Manipulation-model research

Selection. Generalist’s GEN-O materials describe robot-specific manipulation tests and model structure.

Evidence scope. Company research account describing the model and reporting its training-data hours.

Sources: N025:S1

Genesis AI [No26]

Physical manipulation development

Selection. Genesis AI describes GENE-26.5 physical manipulation demonstrations and its data and hand architecture.

Evidence scope. Genesis AI’s release describes physical research demonstrations and data and hand architecture; Eno customer deployment is planned.

Sources: N026:S1 · N026:S2 · N026:S3

Genisom AI [No27]

Robot software development tools

Selection. Genisom provides development documentation connecting VLMs, LLMs, MATRiX and ROS2 with execution procedures.

Evidence scope. Official linked repository; visual navigation reaches simulation instructions, and hardware deployment is marked TODO.

Sources: N027:S1 · N027:S2 · N027:S3 · N027:S4

Gole Robotics [No28]

Construction transport trials

Selection. Gole Robotics tested material transport at a named construction site.

Evidence scope. The recorded construction field trial concerns robot transport of materials at a named site.

Sources: N028:S1 · N028:S2 · N028:S3 · N028:S4 · N028:S5

Google DeepMind [No29]

On-device robotics models

Selection. Google DeepMind's Gemini Robotics On-Device combines a local model, SDK and physical adaptation tests.

Evidence scope. The Gemini Robotics On-Device release covers a local model, SDK and physical adaptation tests under stated research conditions.

Sources: N029:S1

Hello Robot [N111]

Open-vocabulary mobile manipulation development

Selection. Hello Robot maintains the developing Stretch AI integration for language-directed mobile manipulation, connecting semantic memory, navigation and task execution. Its team reports physical pick-and-place demonstrations; inherited Meta HomeRobot and other research methods retain their original attribution.

Evidence scope. Hello Robot repository and documentation, accessed 2026-10-11: developer-reported physical language-directed pick-and-place and experimental code-policy, semantic-memory and navigation integration. The networked GPU configuration uses calibrated hardware; DynaMem also documents a reduced-capability onboard CPU mode.

Sources: N111:S1 · N111:S2 · N111:S3 · N111:S4

Helm.ai [N031]

Driving-model development

Selection. Helm.ai develops driving models under a collaboration whose scope and application pathway are confirmed by a named OEM.

Evidence scope. Customer-confirmed development agreement; mass production, payments and L3 approvals have separate status.

Sources: N031:S1

Hexagon [N032]

Humanoid training and validation

Selection. Hexagon's AEON entered Schaeffler's Humanoid Gym for training and validation.

Evidence scope. Hexagon describes AEON training and validation at Schaeffler's Humanoid Gym. The 1,000-robot figure is a future deployment plan.

Sources: N032:S1

Honda [N033]

Dexterous teleoperation assistance

Selection. Honda describes a dexterous hand using intent estimation and contact feedback, including repeated learning of screwdriver regrasping.

Evidence scope. Honda technical research account; teleoperation and AI assistance are distinct functions, and measured figures are company-reported.

Sources: N033:S1

Hugging Face [N113]

Compact perception-to-action model research

Selection. Hugging Face co-develops SmoVLA, connecting visual observations and instructions to manipulation actions. Its research evaluates SO100 and SO101 physical tasks, with shared credit for academic partners, hardware designers and community data contributors.

Evidence scope. June 2025 research and released model resources: physical manipulation evaluations and task adaptation. LeRobot's separately adopted infrastructure is recognized in Io26; this company entry selects SmoVLA model research.

Sources: N113:S1 · N113:S2 · N113:S3

Intel [No34]

Neuromorphic robot-control research

Selection. Intel contributes Loihi 2 computing to joint NRL/Intel research converting a reinforcement-learning controller into neuromorphic inference for Astrobe simulation.

Evidence scope. Joint NRL/Intel research v1, 2025-12-03: chip-executed inference and closed-loop Astrobe simulation; feasibility validation.

Sources: N034:S1 · N034:S2

Intrinsic [No35]

AI manufacturing integration

Selection. Intrinsic integrates perception and path planning into TRUMPF's SortMaster Vision development.

Evidence scope. TRUMPF SortMaster Vision product integration; the record covers development and software integration.

Sources: N035:S1

JD.com [No36]

Multi-source action learning

Selection. JD.com's JoyAI-RA research describes learning from multiple data sources and evaluation in simulation and physical benchmarks.

Evidence scope. Research-team materials and paper abstract describing the action model.

Sources: N036:S1 · N036:S2

KNOWIN [No39]

Closed-loop policy research

Selection. KNOWIN's GLOW report describes a model and real-robot one-shot and closed-loop evaluations.

Evidence scope. Author-reported physical evaluations; simulation and scene-question-answering results retain their separate test scopes.

Sources: N039:S1 · N039:S2 · N039:S3 · N039:S4

Leju Robotics [No40]

Robot development tools

Selection. Leju's LeTools provides public code and a documented route to physical-robot deployment.

Evidence scope. LeTools' official README describes public code and hardware deployment procedures. Factory agreements are separate corporate records.

Sources: N040:S1 · N040:S2 · N040:S3

LG Electronics [No41]

Household manipulation development

Selection. LG's CLOiD development combines VLM and VLA systems with a wheeled, dual-arm structure for household tasks and appliance integration.

Evidence scope. LG's CES announcement and preview describe CLOiD household-task development and demonstration plans.

Sources: N041:S1

LimX Dynamics [No42]

Hardware-linked development tools

Selection. LimX publishes development tools and robot-specific execution procedures for hardware-linked engineering. In a separate humanoid navigation demonstration, RealSense supplies RGB-D camera input, NVIDIA supplies cuVSLAM odometry and LimX integrates the navigation system.

Evidence scope. LimX's public materials describe hardware-linked development and execution procedures; speed figures are supplier-reported. The undated RealSense account documents camera input in a physical humanoid demonstration. RealSense retains supplier credit outside the 200-company selection.

Sources: N042:S1 · N042:S2 · N042:S3 · N042:S4

Lumos Robotics [No43]

Manipulation data platforms

Selection. Lumos provides FastUMI data-platform code and a physical policy-development path for Touch R1.

Evidence scope. FastUMI repository and Touch R1 documentation cover data and policy-development tools. The JD agreement is a separate partnership event.

Sources: N043:S1 · N043:S2 · N043:S3

Machina Labs [No44]

Closed-loop forming

Selection. Machina Labs combines closed-loop forming with scan-based correction, including a Toyota demonstration pathway.

Evidence scope. Machina Labs describes closed-loop forming, scan correction and a Toyota demonstration. Published depth specifications conflict between 4 ft and 5 ft.

Sources: N044:S1 · N044:S2

MakinaRocks [No45]

Robot maintenance models

Selection. MakinaRocks develops maintenance models for HD Hyundai Samho welding robots, using simulated-fault tests described in its September 2026 technical account.

Evidence scope. The September 2026 technical report covers maintenance-model development and simulated faults on HD Hyundai Samho welding robots.

Sources: N045:S1 · N045:S2

Maven Robotics [N102]

Logistics deployment development

Selection. Maven Robotics describes a product launch and deployment for specific logistics tasks.

Evidence scope. Maven's company announcement describes product release and logistics deployment at an unnamed customer. Accumulated operating hours are a target.

Sources: N102:S1 · N102:S2 · N102:S3

Mentee Robotics / Mentee by Mobileye [No46]

Physical manipulation learning

Selection. Mentee describes observation, offline reinforcement learning and physical execution for battery replacement and handing over cans.

Evidence scope. Company physical-development account; customer trials, success denominators and independent verification remain unavailable.

Sources: N046:S1 · N046:S2 · N046:S3 · N046:S4 · N046:S5

Meta [No47]

Collaborative robotics benchmarks

Selection. Meta publishes PARTNR data and benchmarks, with research describing application to Spot and tests of collaboration, failure and recovery.

Evidence scope. Company research release covering the specified tools and research tests.

Sources: N047:S1

Microsoft [No48]

Robot planning and action models

Selection. Microsoft's Magma repository provides robot-planning demonstrations, training code, model releases and evaluation procedures.

Evidence scope. Magma's official repository and joint research provide planning demonstrations, training code and evaluation procedures.

Sources: N048:S1

Mobilint [No96]

Robot-policy encoder integration research

Selection. Mobilint supplies Aries2 hardware for an external study of robot-policy encoder offloading, retaining hardware credit separately from the researchers' policy and evaluation.

Evidence scope. Research v1, 2026-08-15: physical Aries2 encoder inference, GPU action computation and simulated rollouts; energy, latency and task-success trade-offs.

Sources: N096:S1 · N096:S2

Mobiltech [No97]

Spatial data assets

Selection. Mobiltech supplies documented 3D spatial assets and links them to named test grounds and simulators.

Evidence scope. Mobiltech's published simulation and open-data asset records describe the spatial-data contribution.

Sources: N097:S1 · N097:S2 · N097:S3

MORAI [No49]

Driving simulation tools

Selection. MORAI publishes sensor models, path-generation documentation and driving examples for autonomous-driving development.

Evidence scope. MORAI's documentation and public repository cover driving-simulation sensor models, path generation and examples.

Sources: N049:S1 · N049:S2 · N049:S3

Near Earth Autonomy [No51]

Autonomous aircraft integration

Selection. Near Earth Autonomy reports autonomous AW139 flight and RUC60 integration development.

Evidence scope. Company records describe AW139 autonomous flight tests and RUC60 integration development.

Sources: N051:S1

NEURA Robotics [No52]

Robotics learning platforms

Selection. NEURA describes robots, a learning platform and a joint welding application with Abicor Binzel.

Evidence scope. NEURA's Automatica announcement covers robots, learning infrastructure and a joint welding application. Production-scale goals remain targets.

Sources: N052:S1 · N052:S2

Noetix Robotics [No54]

Reinforcement-learning tools

Selection. Noetix publishes N2 reinforcement-learning code, model export and sim-to-sim procedures.

Evidence scope. Noetix's N2 README provides reinforcement-learning, export and sim-to-sim procedures for research development.

Sources: N054:S1 · N054:S2 · N054:S3

Nota AI [N095]

Robot inference runtime

Selection. Nota's NQRR runtime operated on a Qualcomm board with SO-101 in a color-based cube-transfer demonstration at KRAIN 2026.

Evidence scope. Official technical report of a demonstration; further integration validation remains planned, and general semiconductor contracts retain their own scope.

Sources: N095:S1 · N095:S2 · N095:S3 · N095:S4

Nuro [N055]

Robotaxi employee trials

Selection. Nuro's driving system entered employee ride tests confirmed by Uber, extending its development path beyond delivery vehicles.

Evidence scope. Partner-confirmed employee trials; Lucid vehicle supply, Uber operation and Nuro control retain separate roles.

Sources: N055:S1

Outrider [N056]

Autonomous yard trials

Selection. Outrider's 2024 material describes customer-site movement trials and deep-learning-based connection tasks.

Evidence scope. Outrider's 2024 account describes customer-site trials and learned connection tasks. Customer identities are undisclosed.

Sources: N056:S1 · N056:S2

PaXini [N057]

Tactile manipulation

Selection. PaXini describes tactile-feedback control for DexH13 grasping and handle manipulation, and TORA-ONE cup and wafer tasks.

Evidence scope. PaXini's reports cover physical tactile-control demonstrations; data production capacity and cloud access are announced plans.

Sources: N057:S1 · N057:S2 · N057:S3

Persona AI [No58]

Teleoperated welding

Selection. Persona AI demonstrated physical movement, posture and arc welding at ARC Specialties using teleoperation.

Evidence scope. Persona AI's report describes teleoperated movement, posture and arc welding at ARC Specialties.

Sources: N058:S1 · N058:S2

Physical Intelligence [No59]

Open policy development tools

Selection. Physical Intelligence's openpi provides models, checkpoints and documented inference and fine-tuning procedures.

Evidence scope. The openpi README provides models, checkpoints, inference and fine-tuning instructions as public development resources.

Sources: N059:S1

Qualcomm [No60]

Robotics computing environment

Selection. Qualcomm provides robotics evaluation boards, ROS 2 and Gazebo samples, with a documented separation of perception and control.

Evidence scope. Official developer documentation; compute specifications and actual robot-task performance have separate measurement scopes.

Sources: N060:S1

Raion Robotics [No61]

Quadruped control development

Selection. Raion Robotics records a long-distance mobility test in its company history and describes quadruped-control development.

Evidence scope. Raion's company history describes a long-distance quadruped mobility test and control-development work.

Sources: N061:S1

RealMan [No62]

Robot data and teleoperation

Selection. RealMan describes physical platforms, teleoperation and data QA for RealBot and Darwin development, alongside a data center it reports as operating.

Evidence scope. RealMan describes robot development, teleoperation and data QA, with center scale and operating status reported by the company.

Sources: N062:S1 · N062:S2

Realtime Robotics [No64]

Motion-planning optimization

Selection. Realtime Robotics applied motion-planning tools in a Volkswagen cell proof of concept and described resulting adjustments.

Evidence scope. Supplier proof-of-concept account; evidence concerns automatic path search and collision avoidance, with learning-model attribution excluded.

Sources: N064:S1

Reliable Robotics [No65]

Airborne detect-and-avoid research

Selection. Reliable Robotics tested sensor tracking and ACAS-Xr alerts in actual flight for detect-and-avoid development.

Evidence scope. Reliable-authored report hosted by the FAA; the system had no flight-control authority, and 52 of 56 refers to achieved encounter conditions.

Sources: N065:S1 · N065:S2

Rhoda AI [N109]

Video-pretrained industrial manipulation research

Selection. Rhoda tests how web-video pretraining affects robot-policy performance in industrial bearing unpacking. Its physical evaluation connects model choices to a defined multistep handling task.

Evidence scope. Rhoda research account dated 2026-09-10: bearing-unpacking robot-policy study, task scoring and recorded physical trials; development evaluation in a customer task setting.

Sources: N109:S1

Richtech Robotics [No66]

AI beverage manipulation

Selection. Richtech’s ADAM uses vision and control AI to observe drinks and adjust movement and pouring, as described in its FY2025 filing and later development announcement.

Evidence scope. Richtech’s FY2025 filing and 2026 announcement describe ADAM perception and pouring development. Feature claims retain their stated periods.

Sources: N066:S1 · N066:S2 · N066:S3

RIVR [N110]

Terrain-aware parcel-delivery trials

Selection. RIVR develops wheeled-legged robots for parcel delivery with Veho. The customer's initial field experiment tests stairs, gates and uneven sidewalks while staff accompany the robot and collect learning data.

Evidence scope. Veho customer account, 2025-05-27: accompanied last-meter parcel-delivery experiment; Veho 2026 innovation account reports the launch of RIVR robots.

Sources: N110:S1 · N110:S2

RLWRLD [No67]

Physical policy research

Selection. RLWRLD’s paper describes physical ALLEX and Franka tasks with specified evaluation criteria.

Evidence scope. RLWRLD’s paper reports ALLEX and Franka research tasks; 86.8% is the research team’s average for its specified tasks.

Sources: N067:S1 · N067:S2 · N067:S3 · N067:S4

RoboForce [N105]

Industrial robot pilots

Selection. RoboForce develops TITAN and reports ongoing pilots for robot tasks in demanding industrial environments.

Evidence scope. Company announcements documenting prototype development, pilot activity and contract signing as separate milestones.

Sources: N105:S1 · N105:S2

RobotEra [No68]

Predictive manipulation-policy development

Selection. RobotEra develops the VPP predictive-visual manipulation-policy programme and supplies XHand used in external LeVR experiments. Hardware supply and each research team's policy retain separate attribution.

Evidence scope. RobotEra VPP repository and LeVR v1, 2025-09-17: policy development and real-robot manipulation evaluation with Franka FER and XHand.

Sources: N068:S1 · N068:S2 · N068:S3

ROBROS [No69]

Learned block sorting

Selection. ROBROS demonstrated learned block sorting on physical hardware.

Evidence scope. The physical demonstration covers learned block sorting; service rollout is a target. ROBROS and ROBOTIS are separate companies.

Sources: N069:S1 · N069:S2

Sanctuary AI [No70]

Contact-task learning

Selection. Sanctuary describes learned physical contact tasks on FR3.

Evidence scope. Research-development evidence; the FR3 results and Phoenix factory work are separate activities, while the Magna agreement retains agreement status.

Sources: N070:S1 · N070:S2

Saronic [No71]

Autonomous surface-vessel trials

Selection. Saronic's Corsair completed multi-day trials described as funded by the company's own research and development budget.

Evidence scope. Company account of the reported vessel trials. Marauder is a separate development programme.

Sources: N071:S1 · N071:S2

Siemens [Co88]

Factory integration trials

Selection. Siemens develops control and integration for Humanoid's HMND01 Alpha tote-handling trials at its Erlangen factory.

Evidence scope. Joint announcement, 2026-04-16: factory validation and trial performance targets.

Sources: C088:S1 · C088:S2

Skild AI [No73]

Multi-robot manipulation

Selection. Skild develops robot manipulation through tests and partner pilots. Zebra announced the sale of its Robotics Automation business to Skild in April 2026.

Evidence scope. Company and transaction announcements; Fetch records provide historical business context, and reported deployment and ARR lack independent verification.

Sources: N073:S1 · N073:S2

Sony [No74]

Tool-use learning

Selection. Sony and Edinburgh researchers trained a physical Franka robot to use tools from a small number of demonstrations.

Evidence scope. Joint research report; evidence concerns physical experiments, with commercial robot sales and household deployment outside that scope.

Sources: N074:S1

Spirit AI [No75]

Physical policy deployment support

Selection. Spirit provides documentation for fine-tuning PLo5 and deploying inference on a physical Moz robot.

Evidence scope. Spirit's support documentation describes PLo5 fine-tuning and inference on Moz. Source access requires a support key.

Sources: N075:S1 · N075:S2

Standard Bots [N103]

Robot development and education

Selection. Standard Bots combines physical robots with development and education packages, extending its equipment offering toward learning from demonstrations.

Evidence scope. Standard Bots provides physical robots with development and education packages. It is separate from Standard Robots in China.

Sources: N103:S1 · N103:S2

Sunday [No76]

Household robotics development

Selection. Sunday describes kitchen and household-task development with specific technical stages and a late-2026 beta plan.

Evidence scope. Sunday describes household-task development and a beta planned for late 2026.

Sources: N076:S1

TARS Robotics [No78]

Manipulation data and devkits

Selection. TARS provides devkits and data repositories supporting WIYH physical-manipulation learning.

Evidence scope. WIYH paper, devkit and repository documentation. Chronology follows the cited paper's publication record.

Sources: N078:S1 · N078:S2 · N078:S3 · N078:S4 · N078:S5

Tencent [No79]

Robot platform integration

Selection. Tencent's platform describes model and RoboFusion components used in a Unitree G1 trial at Dunhuang's digital exhibition center.

Evidence scope. Official platform account of the pilot, with hardware contributions by Unitree and EngineAI.

Sources: N079:S1

Tesla [No80]

Humanoid production preparation

Selection. Tesla’s Q2 2026 materials describe Optimus production-line installation, training-data collection and autonomy-compute infrastructure.

Evidence scope. Company production-preparation records; installation, production completion and customer acceptance have separate status.

Sources: N080:S1

Torc Robotics [N108]

Autonomous highway-freight validation

Selection. Torc validates a highway-freight driving system using production-intent hardware in driver-out closed-course tests. Its public-road testing and commercial-launch target describe a continuing development programme.

Evidence scope. Torc validation announcement, 2024-10-29: driver-out multilane closed-course testing; live FAQ accessed October 2026: public-road safety drivers and planned 2027 commercialization.

Sources: N108:S1 · N108:S2

Toyota Motor Corporation / Toyota Research Institute [N107]

Whole-body manipulation-policy development

Selection. Toyota Research Institute jointly develops language-conditioned large behavior models with Boston Dynamics. The partners connect teleoperated training data to physical Atlas manipulation and recovery tests.

Evidence scope. Boston Dynamics joint technical account, accessed October 2026: real-robot and simulated data collection, policy training, and Atlas workshop manipulation evaluation.

Sources: N107:S1

Vayu Robotics [No81]

Learned delivery mobility

Selection. Vayu’s 2024 announcement describes a physical delivery robot combining transformer-based movement with passive optical sensors, plus application to wheeled platforms.

Evidence scope. Company development report and announcement of a 2,500-unit deployment contract.

Sources: N081:S1

Vention [No82]

Industrial perception tools

Selection. Vention provides the GRIIP SDK and describes RapidOperator AI handling object variation and retrying failed tasks.

Evidence scope. Vention’s documentation describes SDK-based perception and retry handling, using NVIDIA development infrastructure.

Sources: N082:S1 · N082:S2 · N082:S3 · N082:S4 · N082:S5

Vueron [No83]

Road sensing trials

Selection. Vueron describes road tests with defined US routes and safety-driver conditions, alongside a documented 2021 Korean trial.

Evidence scope. Vueron’s test material specifies road routes and safety-driver conditions, including a documented Korean trial in 2021.

Sources: N083:S1 · N083:S2 · N083:S3

Waabi [No84]

Autonomous truck integration

Selection. Waabi completed integration with a truck platform confirmed by the OEM, taking its simulation-based model toward physical deployment.

Evidence scope. The OEM announcement confirms Waabi integration with a physical truck platform.

Sources: N084:S1

Wayve [N112]

Linguistic driving-control research

Selection. Wayve's LINGO-2 research model jointly predicts driving trajectories and commentary, with a closed-loop Central London public-road demonstration. Separate Ghost Gym trials compare manoeuvres under different language prompts; explanation/action alignment and reliable real-world language control remain research questions.

Evidence scope. Wayve, 2024-04-17, LINGO-2 architecture and research demonstrations: public-road trajectory execution with commentary in Central London; language-conditioned manoeuvre comparisons in Ghost Gym simulation; open alignment and real-world language-control research.

Sources: N112:S1

WIRobotics [No85]

Research robot models

Selection. WIRobotics publishes MJCF, URDF and USD models, replay examples and evaluation procedures for its v2 research prototype.

Evidence scope. WIRobotics releases research models and replay tools. USD support is experimental, Gazebo is unsupported and mesh use is restricted to evaluation.

Sources: N085:S1 · N085:S2 · N085:S3 · N085:S4 · N085:S5

Wonik Robotics [No86]

Sensing robot hands

Selection. Wonik's Allegro V6 F adds contact sensing and a control interface, extending its hand platform for learning-data development.

Evidence scope. Wonik's September 2026 release specifies V6 F contact sensing and control interfaces; investment funding is described as planned.

Sources: N086:S1

World Labs [No87]

Generated robotics simulation development

Selection. World Labs supplies Marble-generated worlds for two named researchers' robotics simulation experiments, with exported scenes and manually added task assets.

Evidence scope. World Labs case, 2025-11-12: exploratory MuJoCo/RoboSuite and Isaac Sim workflows; generated scenes and task-development experiments.

Sources: N087:S1 · N087:S2

X Square Robot [No88]

Policy training tools

Selection. X Square provides a documented LeRobot integration with training and deployment procedures.

Evidence scope. Official LeRobot guidance describes X Square's policy training and deployment integration, separate from Galaxea's Go hardware.

Sources: N088:S1

Xiaomi [No89]

Physical action-model research

Selection. Xiaomi publishes model and code paths for physical tasks including LEGO disassembly and towel folding.

Evidence scope. Physical manipulation experiments, including LEGO disassembly and towel folding, with published model and code resources.

Sources: N089:S1 · N089:S2 · N089:S3

Xingyuanzhi [No92]

Robot perception and action development

Selection. Xingyuanzhi describes RoboBrain Pro, a jointly developed EP loading and unloading product, robot integration and physical cleaning work.

Evidence scope. Company history and product material; customer-scale and team-background statements have separate evidence scope.

Sources: N092:S1 · N092:S2

XPENG Robotics / IRON [No90]

Humanoid hardware development

Selection. XPENG describes IRON's physical autonomous walking, onboard model and production-line development.

Evidence scope. XPENG's announcement describes physical walking and onboard-model development; 2027 deliveries are planned.

Sources: N090:S1

Yuequan Bionic [No93]

Biomimetic hand prototypes

Selection. Yuequan Bionic's hand prototype performed movements observed in an exhibition report.

Evidence scope. The exhibition account describes a hand prototype performing remote movement imitation without naming its exact model.

Sources: N093:S1 · N093:S2 · N093:S3

Influence 50

Selection based on documented contribution

Abhinav Gupta [P001]

Semantic navigation research

Selection. Abhinav Gupta co-developed SemExp, separating semantic goal selection from path planning in robot navigation.

Evidence scope. CMU's account and the research abstract identify Gupta's joint SemExp contribution.

Sources: P001:S1 · P001:S2 · P001:S3

Anca Dragan [P002]

Intent-aware motion planning

Selection. Anca Dragan's dissertation incorporates an observer's inference of intent into motion planning and evaluates physical collaboration.

Evidence scope. Dragan's dissertation records intent-aware planning and joint physical-collaboration research.

Sources: P002:S1 · P002:S2 · P002:S3

Andrea Thomaz [P003]

Hospital delivery product strategy

Selection. Andrea Thomaz explains choosing interdepartmental item delivery as the hospital robot's product task.

Evidence scope. Founder interview describing the contribution, with Vivian Chu and the product team sharing the work.

Sources: P003:S1 · P003:S2 · P003:S3

Brett Adcock [P043]

Humanoid industrial strategy

Selection. Brett Adcock's named plan chose manufacturing and logistics as early humanoid applications, emphasizing repetitive work in human environments.

Evidence scope. Public strategic plan; BMW negotiations, Helix design and commercial returns have separate attribution.

Sources: P043:S1 · P043:S2

Chelsea Finn [E006]

Robot-policy research and training

Selection. Chelsea Finn contributed policy training and research to pi0.5.

Evidence scope. The joint paper's Appendix A-A names Finn under policy training and research. MAML authorship and public-code reuse are separately documented contributions.

Sources: E006:S1 · E006:S2 · E006:S3 · E006:S4 · E006:S5 · E006:S6

Chen Jianyu [P004]

Corresponding research authorship

Selection. Jianyu Chen is the corresponding author of DWL, contributing to its joint research publication.

Evidence scope. Paper author information; Gu, Wang, Zhu and Shi retain their stated equal project-lead contributions.

Sources: P004:S1 · P004:S2 · P004:S3 · P004:S4

Cheon Hong-seok [P048]

Shared robotics business management

Selection. Cheon Hong-seok describes product launches, initial fundraising and donations to medical institutions in a joint interview with Cheon Yeong-seok.

Evidence scope. Government-supported program interview; evidence concerns shared management choices and their stated execution.

Sources: P048:S1 · P048:S2

Chris Urmson [P005]

Customer operating decisions

Selection. Chris Urmson's signed account describes changing an observer's position after reviewing PACCAR's request.

Evidence scope. Urmson's signed account describes a shared operating decision responding to PACCAR's request.

Sources: P005:S1

Deepak Pathak [P007]

Adaptive locomotion research

Selection. Deepak Pathak co-developed Rapid Motor Adaptation with Ashish Kumar, Zipeng Fu and Jitendra Malik.

Evidence scope. CMU attributes RMA co-development to Pathak and collaborators in physical adaptive-walking research.

Sources: P007:S1 · P007:S2 · P007:S3

Ding Han [P029]

Robotic surface-machining leadership

Selection. Ding Han led a project on robotic machining of large complex surfaces, with documented joint development and industrial application pathways.

Evidence scope. University report covering eight institutions and 30 researchers; application and performance claims are institution-reported.

Sources: P029:S1 · P029:S2

Euisun Chung [P008]

Strategic ownership participation

Selection. Euisun Chung participated as a distinct party in the Boston Dynamics ownership and share-subscription agreement alongside Hyundai affiliates.

Evidence scope. SoftBank's 2020 agreement announcement; valuation and combined ownership have separate scope from personal payments and completed funding.

Sources: P008:S1 · P008:S2

Hang Zhao [P034]

Foundation-model research leadership

Selection. Hang Zhao co-led foundation-model research with Huazhe Xu.

Evidence scope. University account and profile; the role is joint research leadership, with company revenues and model-wide results separately attributed.

Sources: P034:S1 · P034:S2

Hod Lipson [P011]

Robot self-modeling research

Selection. Hod Lipson contributed to research conception, analysis support and review of robot self-modeling work.

Evidence scope. Published contribution statement; Hu and Lin retain their specified method, software, analysis and drafting roles.

Sources: P011:S1 · P011:S2 · P011:S3

Huang Xiaoqing [P050]

Cloud-robot control research

Selection. Huang Xiaoqing co-authored research describing HARI and Igor and their implementations.

Evidence scope. Named joint authorship; individual technical divisions are unpublished, while company-wide results retain organizational attribution.

Sources: P050:S1 · P050:S2

Hyoun Jin Kim [P040]

Aerial-manipulation research

Selection. Hyoun Jin Kim contributed to aerial-manipulation research that demonstrated physical door opening.

Evidence scope. Seoul National University's account identifies Kim's joint aerial-manipulation research and the team's physical door-opening demonstration without assigning individual control-design components.

Sources: P040:S1 · P040:S2

In So Kweon [P038]

DRC-HUBO joint research leadership

Selection. In So Kweon co-led Team KAIST with Jun-Ho Oh and Rainbow researchers at the 2015 DARPA Robotics Challenge. Their DRC-HUBO robot completed the competition's eight tasks and won the finals.

Evidence scope. KAIST's June 2015 competition report identifies shared team leadership and the completed course. It attributes the result to the team rather than assigning individual vision or depth algorithms to Kweon.

Sources: P038:S1 · P038:S2 · P038:S3

Jaeheung Park [Po42]

Balance-control research

Selection. Jaeheung Park co-authored CP-MPC balance-control research reporting physical and simulated validation.

Evidence scope. Paper authorship and abstract identify Park’s joint CP-MPC balance-control research.

Sources: P042:S1 · P042:S2 · P042:S3 · P042:S4

Jeff Cardenas [Po12]

Industrial market-entry strategy

Selection. Jeff Cardenas describes a funding strategy focused on development and early entry into industrial customer applications.

Evidence scope. Founder interview and reporting on shared business decisions; technical design, contract terms and cash recovery have separate attribution.

Sources: P012:S1 · P012:S2 · P012:S3 · P012:S4

Jemin Hwangbo [Po49]

Sim-to-real control research

Selection. Jemin Hwangbo contributed ideas, learned control and simulation design in joint sim-to-real research.

Evidence scope. Published contribution table; experiments are shared and the recovery policy is attributed to J.L., with later Korean commercial use assessed separately.

Sources: P049:S1 · P049:S2 · P049:S3

Jensen Huang [Po13]

Robotics platform strategy

Selection. Jensen Huang presented the public platform direction and releases of GRoot, Cosmos and Isaac.

Evidence scope. Public strategy and launch statements; NVIDIA engineers and robot manufacturers retain model, SDK and integration contributions.

Sources: P013:S1 · P013:S2

Jonathan Hurst [P014]

Biped hardware design

Selection. Jonathan Hurst explains Cassie’s design choices, including changes to motor interaction, steering, feet and enclosure compared with ATRIAS.

Evidence scope. Designer explanation and university account; co-founders and university teams retain joint hardware and control contributions.

Sources: P014:S1 · P014:S2 · P014:S3

Ken Goldberg [P016]

Learned grasping research

Selection. Ken Goldberg co-created Dex-Net with Jeff Mahler, providing a shared research output for learned grasping.

Evidence scope. Official project attribution, with AUTOLAB and the paper’s co-authors sharing the research contribution.

Sources: P016:S1

Kim Yong-jae [P039]

Lightweight assistive-robot research

Selection. Kim Yong-jae’s university profile connects clutch and lightweight-design research with WIRobotics product development.

Evidence scope. University profile and company co-founding history, with Lee Yeon-baek and the research teams sharing the work.

Sources: P039:S1 · P039:S2

Kyoungchul Kong [P037]

Assistive-robot team leadership

Selection. Kyoungchul Kong led a Cybathlon team developing and executing assistive-robot tasks.

Evidence scope. Personal CV; Kim Seung-hwan was the pilot, while the engineering team retains shared development credit.

Sources: P037:S1 · P037:S2

Kyu-Jin Cho [Po47]

Variable-stiffness robotic design

Selection. Kyu-Jin Cho served as corresponding author on a folding drone arm and explained its variable-stiffness design.

Evidence scope. Joint research and Cho’s design explanation concern the folding robotic arm, with named co-authors retaining their roles.

Sources: P047:S1

Leng Xiaokun [Po41]

Humanoid research funding strategy

Selection. Leng Xiaokun describes reinvesting income from smaller products into large-robot research.

Evidence scope. Interview published by his university; evidence concerns a funding choice, with company-wide technology and delivery results separately attributed.

Sources: P041:S1

Linxi “Jim” Fan [Po17]

Reward-generation research

Selection. Jim Fan co-led Eureka and served as corresponding author on research generating and optimizing reward code for robot learning.

Evidence scope. Joint research with Anima Anandkumar and collaborators; the reported 29-environment evaluation is simulation-based.

Sources: P017:S1 · P017:S2

Marc Raibert [Po18]

Dynamic locomotion research

Selection. Marc Raibert pioneered and led research in dynamic legged locomotion.

Evidence scope. Documented historical contribution; later Atlas decisions retain team-level attribution.

Sources: P018:S1

Masayoshi Son [P019]

Strategic transaction decisions

Selection. Masayoshi Son and Yoshimitsu Goto received delegated authority to determine the final terms of SoftBank’s ABB Robotics acquisition agreement. The board resolution and October 2025 agreement document his role in that capital decision.

Evidence scope. SoftBank's October 2025 acquisition agreement, subject to closing conditions, and the board's delegation of final terms-setting authority.

Sources: P019:S1

Melonee Wise [P020]

Product and engineering organization

Selection. Melonee Wise describes building and reorganizing Agility’s engineering and product teams, alongside technology-roadmap work at Zebra.

Evidence scope. Personal 2025 résumé and 2022 employer statement; evidence concerns historical responsibilities rather than a verified current position.

Sources: P020:S1 · P020:S2

Nick Paine [P021]

Actuator design and control

Selection. Nick Paine’s dissertation documents UT-SEA design and control research, including application of some control methods to Valkyrie.

Evidence scope. Named dissertation abstract describing the specified technical work.

Sources: P021:S1 · P021:S2 · P021:S3 · P021:S4

Nikita Rudin [P051]

Parallel locomotion-training research

Selection. Nikita Rudin co-authored a massively parallel locomotion-training approach and curriculum evaluated on ANYmal and transferred to a physical robot.

Evidence scope. Joint research with David Hoeller, Philipp Reist and Marco Hutter; repository records separately document public code and outside reuse.

Sources: P051:S1 · P051:S2 · P051:S3

Oh Jun Ho [E019]

DRC-HUBO joint research leadership

Selection. Oh Jun Ho co-led Team KAIST with In So Kweon and Rainbow researchers in the 2015 DARPA Robotics Challenge.

Evidence scope. KAIST documents joint team leadership and competition task completion, alongside HUBO platform development and use by outside research teams.

Sources: E019:S1 · E019:S2

Oussama Khatib [P022]

Underwater teleoperation research

Selection. Oussama Khatib led OceanOne research and contributed to a remotely operated underwater recovery task.

Evidence scope. 2016 human-teleoperation case; subsequent OceanOneK work and commercial results have separate scope.

Sources: P022:S1

Park Jong Hoon [P023]

Vertical-integration strategy

Selection. Park Jong Hoon describes choosing vertical integration after encountering limits in demand.

Evidence scope. Interview republished by the company; design, manufacturing and solution teams share product-execution credit.

Sources: P023:S1 · P023:S2

Peng Zhihui [P024]

Robot product-development leadership

Selection. Peng Zhihui led X-Lab development associated with the 2025 X2 release.

Evidence scope. An event-organizer profile identifies Peng's joint development leadership on X2.

Sources: P024:S1

Qiao Hong [P030]

Robot control-method research

Selection. Qiao Hong proposed an environment-attractor-region method explicitly attributed to her by CAS.

Evidence scope. CAS's profile attributes the method proposal to Qiao; team members retain application and implementation contributions.

Sources: P030:S1

Richie Chen [P035]

ACR co-development

Selection. Richie Chen participated with Shengdong Xu and Bing Fang in developing ACR after warehouse visits.

Evidence scope. The official white paper describes joint ACR development by Richie Chen, Shengdong Xu and Bing Fang.

Sources: P035:S1 · P035:S2

Rodney Brooks [P025]

Layered robot control

Selection. Rodney Brooks proposed layered robot control in an authored paper. Later researchers explicitly implemented the method.

Evidence scope. Historical original research and subsequent paper; reported simulations and industrial deployments retain distinct status.

Sources: P025:S1 · P025:S2 · P025:S3

Rolf Dieter Schraft [E021]

Robot-programming method research

Selection. Rolf Dieter Schraft co-authored robot-programming and trajectory-adaptation research with C. Meyer for a gluing robot cell.

Evidence scope. The official 2006 abstract describes geometric trajectory primitives and a triangulation-based trajectory metric for robot programming.

Sources: E021:S1 · E021:S2

Sabine Hauert [Po26]

Swarm-control research leadership

Selection. Sabine Hauert co-directed research on explainable swarm control.

Evidence scope. Joint research and experiments; the university account places field application at a later stage.

Sources: P026:S1 · P026:S2

Seok Sang-ok [Po44]

Integrated robotics service strategy

Selection. Seok Sang-ok presented a direction for shared human-robot spaces and integrated services in 2019, later reflected in NAVER 1784's operating pathway.

Evidence scope. Public strategy and subsequent team-operation accounts; development, architecture, cloud and service implementation retain shared credit.

Sources: P044:S1 · P044:S2 · P044:S3

Sergey Levine [Po27]

Learned visual-feedback research

Selection. Sergey Levine co-authored learned visual-feedback grasping research and explained its use of large-scale physical interaction in a signed Google research article.

Evidence scope. Joint research with Pastor, Krizhevsky and Quillen, accompanied by Levine's signed explanation of the research approach.

Sources: P027:S1 · P027:S2

Wang Hesheng [Po33]

Joint perception research

Selection. Wang Hesheng served as corresponding author and co-author of FlowDet-Track.

Evidence scope. FlowDet-Track author information identifies Wang's corresponding-author and joint-publication roles.

Sources: P033:S1 · P033:S2

Wang Tianran [E033]

Industrial robot product-development leadership

Selection. Wang Tianran led historical integration of team-developed controllers with purchased robot bodies and pursued factory applications.

Evidence scope. SIA's retrospective attributes product-development and market-entry decisions to Wang and reports applications at Shenyang Jinbei Seat Factory and Anshan Excavator Factory; controller teams and later Siasun contributors share credit.

Sources: E033:S1 · E033:S2

Wang Xingxing [P028]

Quadruped design and control

Selection. Wang Xingxing designed XDog and held development responsibility for a quadruped group-control system.

Evidence scope. Shanghai University alumni account; team development and later Unitree business results retain separate attribution.

Sources: P028:S1 · P028:S2

Wang Yaonan [P032]

Industrial inspection project leadership

Selection. Wang Yaonan led a pharmaceutical robotic visual-inspection and control project documented by Hunan University.

Evidence scope. 2019 institutional account, with researchers, equipment makers and application companies sharing the contribution.

Sources: P032:S1 · P032:S2 · P032:S3

Zhao Mingguo [E034]

Joint humanoid-soccer research leadership

Selection. Zhao Mingguo's team developed vision-driven reactive soccer research; Zhao served as corresponding author and Wang Yushi as first author.

Evidence scope. Tsinghua reports physical Booster T1 tasks and competition use, crediting student researchers, partner institutions, hardware and test-site support.

Sources: E034:S1 · E034:S2 · E034:S3

Zhou Jian [Po46]

Humanoid research investment

Selection. Zhou Jian decided to fund and continue large-humanoid research in 2015 despite internal objections, according to a retrospective account.

Evidence scope. A retrospective article attributes a 2015 humanoid research-funding decision to Zhou.

Sources: P046:S1 · P046:S2 · P046:S3

Zhu Qiuguo [Po31]

Quadruped stability-control research

Selection. Zhu Qiuguo held a principal research role in dynamic stability control for the Jueying quadruped.

Evidence scope. 2019 university research announcement; later DEEP Robotics operations and customer outcomes have separate scope.

Sources: P031:S1 · P031:S2 · P031:S3

Ecosystem Builders 50

Selection based on documented contribution

Aaron Ames [E001]

Shared gait-planning tools

Selection. Aaron Ames co-authored FROST with Hereid, providing a public MATLAB tool for gait planning.

Evidence scope. Caltech repository attribution and simulation examples; authorship is shared and examples concern simulation.

Sources: E001:S1 · E001:S2

Aaron Prather [E002]

Industry testing workshops

Selection. Aaron Prather co-organized a 2025 workshop bringing together research, industry and testing participants, with named presentation materials.

Evidence scope. Workshop organization and presentation records; Beiter, Saidi, Sentis and other contributors retain their roles.

Sources: E002:S1 · E002:S2 · E002:S3 · E002:S4 · E002:S5

Andra Keay [E003]

Robotics community support

Selection. Andra Keay provided advice, community connections and sustained support described in Women in Robotics records and Sue Keay's account.

Evidence scope. Organizational records and testimony from her sister; independent industry-wide effects remain unmeasured.

Sources: E003:S1 · E003:S2

Ayanna Howard [E004]

Accessible STEM technology transfer

Selection. Ayanna Howard describes founding Zyrobotics after NSF I-Corps participation and licensing laboratory technology into STEM products for children.

Evidence scope. Howard's university interview describes historical licensing and accessible STEM-product development.

Sources: E004:S1 · E004:S2

Brian Gerkey [E005]

Open robotics architecture

Selection. Brian Gerkey co-designed ROS and ROS 2 and helped connect open robotics development across institutions, including a documented NVIDIA collaboration.

Evidence scope. Joint design and partner records; Tully Foote and the wider developer community retain their technical contributions.

Sources: E005:S1 · E005:S2 · E005:S3

Bruce Leak [E052]

Founder and board support

Selection. Bruce Leak co-founded Playground and served on Agility Robotics' board, supporting founders and capital access.

Evidence scope. Founding and board-participation records; investment amounts, technical design and portfolio outcomes remain separately attributed.

Sources: E052:S1

Cho Kyu-nam [E047]

Public industry discussion

Selection. Cho Kyu-nam moderated a July 2024 discussion, asking concrete questions about industrial competitiveness, market entry and infrastructure.

Evidence scope. The 2024-07-24 roundtable transcript records Cho's questions and the participants' responses.

Sources: E047:S1 · E047:S2

Christian Hubicki [E007]

Control and simulation education

Selection. Christian Hubicki led optimal-control and simulation teaching at IMSI, with links to code and answers for participants.

Evidence scope. An IMSI workshop page provides Hubicki's teaching record and links to code and answers.

Sources: E007:S1 · E007:S2 · E007:S3

Craig Schlenoff [E008]

Shared robotics evaluation

Selection. Craig Schlenoff contributed conceptualization, project management, supervision and drafting to ARIAC's shared evaluation work.

Evidence scope. The available published contribution statement credits conceptualization, project management, supervision and drafting of the shared ARIAC evaluation work.

Sources: E008:S1 · E008:S2 · E008:S3

Cyril Ebersweiler [E053]

Hardware startup support

Selection. Cyril Ebersweiler helped found and operate HAX, with Neptune Robotics documenting use and subsequent support.

Evidence scope. Shared incubator and beneficiary records; beneficiary technology and investment-wide outcomes retain separate attribution.

Sources: E053:S1 · E053:S2

Daniela Rus [P006]

Robotics doctoral mentoring

Selection. Daniela Rus supervised Joseph DelPreto's completed doctorate and supported his research direction and lab community.

Evidence scope. The dissertation identifies Rus as thesis supervisor and acknowledges her guidance; MIT separately credits Rus and DelPreto as Conduct-A-Bot coauthors.

Sources: P006:S1 · P006:S2 · P006:S3

Dennis Hong [E009]

Research and education platforms

Selection. Dennis Hong led RoMeLa's public robotics platforms for research and education.

Evidence scope. Platform and education records, with students, research teams and ROBOTIS sharing hardware and software contributions.

Sources: E009:S1 · E009:S2

Elena Messina [E010]

Joint standards and testing

Selection. Elena Messina contributed to named joint standards and testing outputs for robotics.

Evidence scope. Documented joint standards and test contributions; individual and institutional functions retain separate attribution.

Sources: E010:S1 · E010:S2

Elham Tabassi [E011]

AI risk-management framework

Selection. Elham Tabassi authored NIST’s publicly available AI RMF 1.0, providing risk-management language reusable in Physical AI procurement and trust discussions.

Evidence scope. NIST author attribution and framework publication; this is a cross-domain AI framework, with robot-specific safety certification assessed separately.

Sources: E011:S1 · E011:S2

Erico Guizzo [E012]

Robotics editorial resources

Selection. Erico Guizzo co-created the concept and content of Robots Guide, providing an editorial route into robotics knowledge.

Evidence scope. Project attribution; Randi Klett, Evan Ackerman and the design and development teams retain shared contributions, with readership effects unmeasured.

Sources: E012:S1 · E012:S2

Fei-Fei Li [E013]

Shared vision data and challenges

Selection. Fei-Fei Li helped build ImageNet’s shared dataset and challenge, which drew participation from multiple institutions.

Evidence scope. ImageNet’s historical data and 2010 challenge records identify shared author and organizer contributions.

Sources: E013:S1 · E013:S2

Francesca Rossi [E014]

Autonomous-system design ethics

Selection. Francesca Rossi co-chaired IEEE EAD's embedding-values committee and participated in named IBM research.

Evidence scope. IEEE committee record and joint research; the contribution concerns public design knowledge rather than product certification.

Sources: E014:S1 · E014:S2

Geordie Rose [P009]

Robotics partner investment and support

Selection. Geordie Rose describes building robotics partnerships through investment and licensing; Apptronik's CEO credits his board support.

Evidence scope. Sanctuary's signed retrospective and partner quotation describe corporate partnerships, investment and board support.

Sources: P009:S1 · P009:S2 · P009:S3

Gill Pratt [P010]

Shared robotics test-program leadership

Selection. Gill Pratt led DARPA's Robotics Challenge program, providing common disaster-response tasks and test conditions for competing robot teams.

Evidence scope. DARPA identifies Pratt as program manager and describes human-supervised systems and degraded communications; participating teams contributed their hardware, software and algorithms.

Sources: P010:S1 · P010:S2 · P010:S3 · P010:S4

Han Jae-kwon [E050]

Public robotics education

Selection. Han Jae-kwon and Lee Byung-joo delivered robotics lectures at Hanyang's August 2022 Robot Day.

Evidence scope. Hanyang reports lectures, demonstrations and robot-making activities. The separate HERoEHS team paper credits Han with ALICE's mechanical design and Younseal Eum with exterior design.

Sources: E050:S1 · E050:S2 · E050:S3 · E050:S4 · E050:S5 · E050:S6 · E050:S7

He Wang [E044]

Shared dexterous-grasp benchmark and tools

Selection. He Wang was corresponding author of BODex's joint benchmark, data and code release; UltraDexGrasp documents adapting its code.

Evidence scope. BODex names Jiayi Chen and Yubin Ke as equal contributors. UltraDexGrasp's README identifies its adapted BODex API and credits the upstream code.

Sources: E044:S1 · E044:S2

Henrik Christensen [E015]

Shared robotics roadmaps

Selection. Henrik Christensen served as a principal writer of repeated Robotics Roadmap editions, organizing a shared research agenda.

Evidence scope. UCSD attribution and joint roadmap publications, with co-authors and workshop participants sharing the contribution.

Sources: E015:S1 · E015:S2

Jiyang Gao [P036]

Dataset-and-model programme coordination

Selection. Jiyang Gao co-supervised Galaxea's dataset-and-model research programme with Hang Zhao and Huazhe Xu. This entry recognizes coordination of the team's shared research capability.

Evidence scope. The paper describes the dataset and Go model; Section 8 names the three supervisors and separately credits dataset operations and policy training. Version 1 announced public release as a forthcoming step.

Sources: P036:S1

Jung Kim [E036]

Startup-development programs

Selection. Jung Kim led KAIST's Robot Valley program, with the university identifying actual startup-competition beneficiaries.

Evidence scope. University program account; operations are shared and new model and robotic-skin plans retain planned status.

Sources: E036:S1

Karol Hausman [P015]

Robot-learning infrastructure

Selection. Karol Hausman contributed robot infrastructure and writing to pio.5.

Evidence scope. Appendix A-A attributes robot infrastructure and writing to Hausman within the joint research team.

Sources: P015:S1 · P015:S2 · P015:S3

Li Zexiang [E016]

Startup education and manufacturing support

Selection. Li Zexiang connects practical education with startup mentoring, early capital and supply-chain support through documented ecosystem-building work.

Evidence scope. University account of shared X-Tech and XbotPark activities; company-specific effects and current support outcomes lack independent measurement.

Sources: E016:S1 · E016:S2

Liang Jing [E037]

Standards working-group operations

Selection. Liang Jing organized and chaired work described in official annual-meeting records, including organizational reporting and an open project call.

Evidence scope. Official meeting record; standards-system publication and individual product testing or certification have separate scope.

Sources: E037:S1

Lior Susan [E051]

Industrial startup organization

Selection. Lior Susan helped establish Eclipse and organized Bright Machines' founding, separation and funding support.

Evidence scope. Participant interview concerning startup and organizational work; portfolio-wide results retain company and team attribution.

Sources: E051:S1

Liu Lianqing [E030]

Robotics doctoral supervision

Selection. Liu Lianqing supervised named completed doctoral research by Zhou Peilin.

Evidence scope. Institute records of supervision and research; students and co-authors retain their technical contributions.

Sources: E030:S1 · E030:S2 · E030:S3

Matt Beane [E017]

Work and skill-transition research

Selection. Matt Beane published long-term field research on robotic surgery and shadow learning, contributing knowledge about work and training transitions.

Evidence scope. UCSB research account and published study; observations and measured effects of training-system changes have separate scope.

Sources: E017:S1 · E017:S2

Matthew Johnson-Roberson [E018]

Robotics doctoral supervision

Selection. Matthew Johnson-Roberson advised Tianyi Zhang's completed doctorate on underwater 3D visual perception and generation.

Evidence scope. CMU records the August 2025 doctorate and advisor. Johnson-Roberson also co-authored synthetic-data research described in Driving in the Matrix.

Sources: E018:S1 · E018:S2 · E018:S3

Mayank Mittal [E055]

Public robot-learning infrastructure

Selection. Mayank Mittal led development work on Isaac Lab, providing public code reused in robotics learning research.

Evidence scope. Development attribution and application research; NVIDIA, ETH and other developers retain shared credit, with full replication unperformed.

Sources: E055:S1 · E055:S2 · E055:S3

Morgan Quigley [E056]

ROS architecture

Selection. Morgan Quigley co-designed ROS and contributed to its architecture and public development infrastructure.

Evidence scope. Original joint research and development records; roles are shared with Gerkey, Foote and other contributors.

Sources: E056:S1 · E056:S2 · E056:S3

Pieter Abbeel [E020]

Robotics-control education

Selection. Pieter Abbeel repeatedly provided robotics-control education with documented student activities.

Evidence scope. Course and student-activity records; the contribution concerns education infrastructure, with company and investment outcomes separately attributed.

Sources: E020:S1 · E020:S2 · E020:S3 · E020:S4

Qin Xiugong [E049]

Shared standards terminology

Selection. Qin Xiugong co-drafted a foundational standard whose terminology was reused in T/CESA 1450-2025.

Evidence scope. Named joint drafting and later terminology references document the foundational standard's reuse.

Sources: E049:S1 · E049:S2 · E049:S3 · E049:S4

Qu Daokui [E048]

Research commercialization

Selection. Qu Daokui describes commercializing research through a startup team and distinguishes company industrialization from institute research.

Evidence scope. Field interview republished by the institute, describing the shared technology-transfer contribution.

Sources: E048:S1

Russ Tedrake [E022]

Shared control software

Selection. Russ Tedrake helped initiate Drake with MIT and Toyota Research Institute.

Evidence scope. Official Drake credits; other developers and the institutions retain joint development and support contributions.

Sources: E022:S1 · E022:S2 · E022:S3

Ryan Gariepy [E023]

Developer exchange and education

Selection. Ryan Gariepy repeatedly participated in and co-led ROSCon, supporting developer exchange and education.

Evidence scope. ROSCon opening materials and committee records identify Gariepy's repeated participation and joint organizing role.

Sources: E023:S1 · E023:S2 · E023:S3 · E023:S4

Rémi Cadène / Remi Cadene [E024]

Open robot-learning tools

Selection. Rémi Cadène led LeRobot, whose development resources appear in external hardware workflows.

Evidence scope. Leadership attribution and Trossen documentation; the library is jointly developed and external use has experimental version constraints.

Sources: E024:S1 · E024:S2 · E024:S3 · E024:S4 · E024:S5

Shi Lin [E039]

Joint evaluation-standard authorship

Selection. Shi Lin co-authored YD/T 6770-2026, contributing to a common Physical AI evaluation framework.

Evidence scope. National standards information names Shi Lin among the co-authors of YD/T 6770-2026.

Sources: E039:S1 · E039:S2

Sun Lining [E025]

Regional research and talent programs

Selection. Sun Lining describes establishing a research institute, degree programs and talent-development activities supporting regional industry.

Evidence scope. University-published interview describing the historical activities.

Sources: E025:S1

Tom Ryden [E026]

Shared facility operations

Selection. Tom Ryden took on operations supporting shared facilities, programs and resident companies at MassRobotics.

Evidence scope. Tom Ryden's March 2022 retrospective describes facility operations and programme development; the founding concept is credited to named founders.

Sources: E026:S1 · E026:S2

Tully Foote [E027]

ROS units and coordinate conventions

Selection. Tully Foote co-authored common ROS unit and coordinate conventions with Mike Purvis, supporting compatibility across developers.

Evidence scope. Joint REP authorship and ROS 2 message conventions; technical conventions and institutional coordination have distinct attribution.

Sources: E027:S1 · E027:S2 · E027:S3 · E027:S4

Vincent Vanhoucke [E028]

Research-team formation

Selection. Vincent Vanhoucke established a Google robotics research team and participated in subsequent joint research.

Evidence scope. Historical official profile and joint outputs; team formation and support are distinguished from individual algorithm design.

Sources: E028:S1 · E028:S2 · E028:S3

Wang Tianmiao [E043]

Talent and startup support

Selection. Wang Tianmiao supported talent and startup development, with Beihang naming beneficiaries and documenting a scholarship donation.

Evidence scope. Beihang's commemorative account describes talent support, named startup beneficiaries and a scholarship donation.

Sources: E043:S1

Wei Kai [E045]

Joint evaluation-standard authorship

Selection. Wei Kai co-authored YD/T 6770-2026, contributing to a specific Physical AI evaluation output.

Evidence scope. National standards author listing; evidence covers shared authorship rather than sole clause design or operation of testing institutions.

Sources: E045:S1 · E045:S2 · E045:S3

Wendy Tan White [E054]

Shared development organization

Selection. Wendy Tan White organized shared robotics development through integration of OSRC's business and staff, with partner use in actual development tasks.

Evidence scope. Management and partner-use records; Gerkey, Kroeger, NVIDIA, DeepMind and other technical contributors retain their roles.

Sources: E054:S1 · E054:S2

Xiong Rong [E032]

Student research platforms

Selection. Xiong Rong guided Zhejiang University's robotics competition training and its ZJUNliet student team.

Evidence scope. Zhejiang University's November 2007 teaching report names Xiong as supervisor of robotics training. ZJUNliet's team description credits her guidance and successive student teams.

Sources: E032:S1 · E032:S2 · E032:S3 · E032:S4

Yuh Joon-ku [E041]

Research-agenda editing

Selection. Yuh Joon-ku co-edited a research-direction workshop report, providing a historical public research and education resource.

Evidence scope. University publication list and NOAA-preserved report cover from 1994 to 1996; evidence concerns joint editing.

Sources: E041:S1 · E041:S2 · E041:S3

Zhang Jianwei [E029]

Multi-institution research coordination

Selection. Zhang Jianwei coordinated the six-institution RACE robotics consortium from December 2011 to November 2014.

Evidence scope. Hamburg names Zhang as coordinator; the joint PR2 evaluation paper credits its authors for architecture, metrics and physical restaurant-task research.

Sources: E029:S1 · E029:S2 · E029:S3 · E029:S4 · E029:S5

Institutions 50

Selection based on documented contribution

ARM Institute [I001]

Manufacturing adoption support

Selection. ARM Institute helped Keystone Ridge move from evaluation and proof of concept through an RFP to installation of a robot cell.

Evidence scope. Institute case with customer quotations; evidence concerns the named adoption pathway.

Sources: I001:S1 · I001:S2

ASTM F45 [I003]

Mobile-robot performance standards

Selection. ASTM F45 provides performance-test standards for unmanned mobile tasks, with NIST documenting the technical basis of its first four standards.

Evidence scope. NIST's 2018 record documents publication of ASTM F45's first four mobile-task performance standards.

Sources: I003:S1 · I003:S2

Beijing Humanoid Robot Innovation Center [I047]

Shared robot-training data

Selection. Beijing Humanoid Robot Innovation Center co-developed RoboMIND, with government material naming external institutions using it for training.

Evidence scope. Government development and use report; download counts and unique users are distinct measures, with independent use verification limited.

Sources: I047:S1

BIGAI [I004]

Shared robotics research tools

Selection. BIGAI co-authored RoboVerse, with RLinf documenting its integration into research workflows.

Evidence scope. Named institutional co-authors and external integration account, with partner institutions and existing simulators sharing the contribution.

Sources: I004:S1 · I004:S2 · I004:S3 · I004:S4

CESI [I005]

Data-quality standards authorship

Selection. CESI co-authored a published embodied-intelligence data-quality document, contributing technical content to a public standards output.

Evidence scope. The official document identifies CESI as a joint technical author, with SAC retaining the standards-administration role.

Sources: I005:S1 · I005:S2 · I005:S3

CMU Robotics Institute [I006]

Robotics research and education

Selection. CMU's Robotics Institute supports robotics research and education. Its NREC partnered with Carnegie Robotics to commercialize robotic components and systems.

Evidence scope. CMU's 2010 partnership record documents NREC technology transfer to Carnegie Robotics; NREC remains within the institute's activity record.

Sources: I006:S1 · I006:S2 · I006:S3 · I006:S4 · I006:S5

DARPA SubT [I007]

Shared physical test environments

Selection. DARPA's SubT competition provided shared physical test environments and tasks used by teams including CSIRO Data61, Emesent and Georgia Tech.

Evidence scope. Participant account of the competition ending in 2021; team-developed robots and autonomy retain separate attribution.

Sources: I007:S1 · I007:S2 · I007:S3

DFKI Robotics Innovation Center [I008]

Industrial robotics research

Selection. DFKI's Robotics Innovation Center participated in TransFit research with Bremen and Siemens, producing joint research outputs.

Evidence scope. The 2017 to 2021 TransFit record covers German research collaboration and published outputs.

Sources: I008:S1 · I008:S2

ETRI [I009]

Robotics technology transfer

Selection. ETRI transferred FMS to Twinny and supported recipient-specific joint development through staff working at the company.

Evidence scope. ETRI Webzine Vol.225 documents FMS transfer to Twinny, on-site staff support and joint software adaptation for people working alongside robots.

Sources: I009:S1 · I009:S2

euRobotics [I010]

Robotics research ecosystem

Selection. CORDIS records euRobotics' coordination of RockEU2 and the launch and operation of two ERL seasons.

Evidence scope. Completed project and competition records; market forecasts retain forecast status.

Sources: I010:S1 · I010:S2

FAA [I011]

BVLOS package-delivery authorization

Selection. The FAA authorized Zipline to deliver commercial packages beyond visual line of sight in 2023, establishing a defined regulatory route for the operator.

Evidence scope. The FAA's 2023 authorization covers Zipline commercial-package delivery beyond visual line of sight under the specified approval scope.

Sources: I011:S1 · I011:S2

Harvard Wyss Institute [I012]

Assistive-robot research and licensing

Selection. Harvard Wyss and SEAS researchers developed personalized soft-exosuit assistance from muscle ultrasound and tested it across walking speeds and inclines. Wyss also records technology licensing to ReWalk.

Evidence scope. Harvard's November 2021 account documents joint Wyss and SEAS research and walking tests. The ReWalk licensing record covers a separate technology-transfer activity.

Sources: I012:S1 · I012:S2

HIT Robotics Technology and Systems Research Unit [I013]

Physical robotics research infrastructure

Selection. HIT's robotics technology and systems research unit supported a learning-method project through resources, supervision and physical-robot experiments.

Evidence scope. Project acknowledgments, resource and supervision records, and physical experiments describe the research unit's support; authors retain algorithm credit.

Sources: I013:S1 · I013:S2 · I013:S3

HKEX / HKSCC [I014]

Listing and clearing access

Selection. HKEX and HKSCC provided listing and clearing access used by UBTECH, whose listing began on 2023-12-29.

Evidence scope. Issuer listing confirmation and clearing notice; the notice supplies no actual fundraising amount.

Sources: I014:S1 · I014:S2

IEC Robotics Product Safety Standards [I015]

Robot-product safety standards

Selection. IEC robotics-product safety work provides a lawn-robot standard edition cited in a manufacturer's conformity declaration.

Evidence scope. Standard edition and manufacturer declaration; the declaration and an IEC-issued product certificate have different status.

Sources: I015:S1 · I015:S2 · I015:S3

IFR [I016]

Robot statistics and definitions

Selection. IFR provides recurring robot statistics and definitions through a documented collection and publication structure.

Evidence scope. Industrial and service robotics statistics; coverage differs from the full Physical AI sector and company rankings.

Sources: I016:S1

ISO/TC 299 [I017]

Robotics standards development

Selection. ISO/TC 299 develops shared robotics standards through published outputs, participating countries and industrial organizations.

Evidence scope. Committee and publication records distinguish published standards from standards under development.

Sources: I017:S1

KAIST [I018]

Shared humanoid research platforms

Selection. KAIST's HUBO platform supports outside research and education. Drexel describes using HUBO Lab hardware and student software in performances and joint research.

Evidence scope. External-user account; university, laboratory and center contributions remain within one institutional record.

Sources: I018:S1 · I018:S2

KEIT [I020]

Robotics research funding

Selection. KEIT supported humanoid balance-recovery research whose paper identifies the funded project and partial support.

Evidence scope. 2011 paper acknowledgment; KEIT's funding and management role is distinct from the researchers' algorithms and experiments.

Sources: I020:S1 · I020:S2 · I020:S3 · I020:S4

KIAT [I022]

Robotics R&D funding

Selection. KIAT funded project P0014166, whose researchers reported implementation and experiments on a robotics safety testbed.

Evidence scope. Completed paper and funding acknowledgment; KIAT provided support while KIRIA researchers implemented and tested the system.

Sources: I022:S1 · I022:S2 · I022:S3 · I022:S4

KIRIA [I023]

Robot testing and certification

Selection. KIRIA issued KS certification for a wearable-robot product, confirmed in Hyundai's announcement.

Evidence scope. Hyundai's announcement identifies KIRIA's KS certification of the specified non-powered wearable product.

Sources: I023:S1 · I023:S2

KITECH [I024]

Robot digital-twin research

Selection. KITECH researchers connected a physical robot with Isaac Sim and compared forward motion, turning and LiDAR messages.

Evidence scope. Completed digital-twin implementation research; automated learning parameters and quantitative network-loss evaluation remain future tasks.

Sources: I024:S1 · I024:S2 · I024:S3 · I024:S4 · I024:S5

KRX [I050]

Robotics listing and disclosure access

Selection. KRX provided KOSPI listing and trading access for Doosan Robotics, documented by the issuer's completed listing and contract records.

Evidence scope. Issuer listing records; subscription deposits and bookbuilding demand have separate scope from newly received issuer funds.

Sources: I050:S1 · I050:S2

KTL [I025]

Wearable-robot testing

Selection. KTL provided testing used by Dari Technology, whose history records wearable-robot IP55, payload and weight test reports.

Evidence scope. Recipient's test-report history; evidence concerns these specific external tests.

Sources: I025:S1 · I025:S2 · I025:S3

LeRobot / Hugging Face [I026]

Shared robot-learning infrastructure

Selection. LeRobot provides public code and data formats integrated into an external Trossen hardware workflow.

Evidence scope. Project resources and experimental external documentation with version constraints; repository popularity has a different scope from active deployments.

Sources: I026:S1 · I026:S2

MassRobotics [I027]

Shared development facilities

Selection. MassRobotics operates shared development space and experimental resources for named resident companies.

Evidence scope. Resident and program records; the residency program provides access and states that it supplies no direct funding or equity investment.

Sources: I027:S1

MIIT [I028]

Robotics application policy

Selection. MIIT jointly implemented selection and dissemination of 2024 mining-robot applications under the Robot+ plan.

Evidence scope. The final application-selection notice records joint policy implementation with the mining-safety authority.

Sources: I028:S1 · I028:S2 · I028:S3

MIT CSAIL [I029]

Human-robot interaction research

Selection. MIT CSAIL conducted gesture-control research connecting EMG, learning and physical-drone experiments, with partial Boeing support.

Evidence scope. Joint DelPreto and Rus research; Boeing's role is funding, and Parrot retains drone-hardware credit.

Sources: I029:S1

NASA Jet Propulsion Laboratory [I030]

Planetary robotics operations

Selection. JPL built and operated a Mars rover whose records describe autonomous perception, planning and physical driving.

Evidence scope. Official account accompanying an animation of 2023-07-15 drive data; destination setting and ground-team planning remain part of operations.

Sources: I030:S1 · I030:S2

Nasdaq [I031]

Robotics public-market access

Selection. Nasdaq provided public-market access for Serve through a completed share offering and Nasdaq Capital Market trading.

Evidence scope. 2024 issuer record; USD 40 million is gross offering proceeds before costs, and the over-allotment option has separate execution status.

Sources: I031:S1

National Robot Testing and Evaluation Center, Shanghai Headquarters [I048]

Shanghai robot certification

Selection. The National Robot Testing and Evaluation Center's Shanghai headquarters issued CR certification for AgiBot Genie G2 through Shanghai Robot Industry Technology Research Institute.

Evidence scope. The July 2026 report names the Shanghai implementing carrier; the platform page separately identifies Shanghai Electrical Apparatus Research Institute (Group) Co., Ltd. as the headquarters construction unit.

Sources: I048:S1 · I048:S2

New York Stock Exchange / NYSE [I053]

Historical issuer trading access

Selection. NYSE provided historical trading access for Ouster, recorded in the issuer's 2021 annual report.

Evidence scope. Historical issuer filing; Ouster's announced December 2024 transfer to Nasdaq is a separate event.

Sources: I053:S1 · I053:S2

NHTSA [I032]

Automated-driving recall reporting

Selection. NHTSA provides public safety-recall reporting, including Waymo's manufacturer-submitted report on an automated-driving flooding hazard.

Evidence scope. Recall 26E026, submitted May 6, 2026, records interim operating restrictions and a final remedy under development at filing.

Sources: I032:S1 · I032:S2 · I032:S3

NIOSH / Center for Occupational Robotics Research [I054]

Occupational robotics hazard research and guidance

Selection. NIOSH contributed to joint workplace-robotics guidance and published fatality and nonfatal-injury research relevant to worker protection.

Evidence scope. Joint guidance credits A3 engineers and NIOSH researchers. The 2023 fatality study covers 1992-2017; the 2026 NIOSH/Ohio study analyzes 1,076 claims from 2001-2020 and credits Ohio's data provision and the joint research team.

Sources: I054:S1 · I054:S2 · I054:S3 · I054:S4

NIST [I033]

Robotics measurement methods

Selection. NIST develops robot mobility measurements, tests and standards through an actual measurement program.

Evidence scope. Specific robotics measurement outputs; safety certification and the wider AI RMF are separate functions.

Sources: I033:S1 · I033:S2

Open Robotics / OSRF [I034]

Open robotics software infrastructure

Selection. The nonprofit OSRF provides and maintains open software used in robotics research and product development under the Open Robotics brand.

Evidence scope. Organizational and software records; sold OSRC businesses and Intrinsic revenue retain separate legal and commercial scope.

Sources: I034:S1 · I034:S2 · I034:S3

Open X-Embodiment consortium [I035]

Shared learning data and models

Selection. Open X-Embodiment provides shared data formats and RT-X models used by multiple laboratories in physical-robot evaluations.

Evidence scope. Named consortium research; participation counts vary by edition and rights differ across datasets.

Sources: I035:S1 · I035:S2

OSHA Robotics Safety Guidance [I036]

Workplace robotics safety guidance

Selection. OSHA provides an updated robotics safety technical manual for inspectors and workplace safety staff.

Evidence scope. 2022 joint-guidance announcement; A3 engineering and NIOSH research retain separate contributions, with field inspection effects unmeasured.

Sources: I036:S1 · I036:S2

POSTECH [I037]

Joint hospital-robotics research and evaluation

Selection. POSTECH's Keehoon Kim and Jaewon Byun co-developed hospital disinfection robotics with KIST, KIRO, Elphoton and Pohang St. Mary's Hospital.

Evidence scope. Institution-reported wiping and UV-C research and hospital evaluation; KIST's Sang-Rok Oh is named project director, and KIRO researchers retain joint credit.

Sources: I037:S1 · I037:S2 · I037:S3

RAI Institute [I038]

Public robot-learning tools

Selection. RAI Institute published learning code, Spot deployment methods and MIT-licensed research resources applied to Spot and Atlas hardware.

Evidence scope. Published learning code and hardware methods for Spot and Atlas. The repository README identifies its maintenance status as inactive.

Sources: I038:S1 · I038:S2 · I038:S3 · I038:S4

SAC [Io39]

National standards administration

Selection. SAC administered official publication of a specific national standard, with TC28 attribution and SC42 execution identified in the standards system.

Evidence scope. Official standards-publication record, with CESI credited for technical authorship.

Sources: I039:S1 · I039:S2 · I039:S3

SEC [Io40]

Issuer disclosure review

Selection. The SEC reviewed Serve disclosures, including questions about funding constraints and deployment outlook.

Evidence scope. Actual review correspondence; filing effectiveness, secondary share sales and new proceeds retain separate regulatory and financial meanings.

Sources: I040:S1 · I040:S2

Shanghai AI Lab [Io41]

Shared simulation research

Selection. Shanghai AI Lab's InternUtopia was used for simulation evaluation by the named external EA-Nav research team.

Evidence scope. External paper reporting use; public code and downloads have separate scope from physical commercial operations.

Sources: I041:S1 · I041:S2 · I041:S3

Shanghai Stock Exchange [Io51]

Industrial issuer market access

Selection. Shanghai Stock Exchange provided market access for welding-robot issuer Kaiierda, with trading beginning on 2021-10-25 under 688255.

Evidence scope. Official listing notice; the exchange provides a market channel, while company proceeds and revenues retain issuer-level scope.

Sources: I051:S1

Shenzhen Stock Exchange [I052]

Industrial issuer market access

Selection. Shenzhen Stock Exchange provided listing and new-share fundraising access for industrial automation issuer Estun under 002747.

Evidence scope. Official issuer-market announcement; the exchange is a market channel, with company-wide proceeds and revenues retaining their own scope.

Sources: I052:S1

SIA [I046]

Industrial technology transfer

Selection. SIA supported industrial-robot technology transfer through research-team commercialization and Siasun's formation.

Evidence scope. The SIA-hosted historical account documents team and core-technology transfer. The Shenyang/Liaoning testing website identifies a separate location within the national testing network.

Sources: I046:S1 · I046:S2 · I046:S3 · I046:S4

Toyota Research Institute [I042]

Robot learning and control research

Selection. Toyota Research Institute co-developed and supported Drake and provided manipulation research and public benchmarks used in robotics work.

Evidence scope. Development, research and benchmark-use records; Toyota manufacturing results and TRI research retain separate scope.

Sources: I042:S1 · I042:S2 · I042:S3

UC Berkeley BAIR: RAIL BridgeData [I043]

Shared robot data and training tools

Selection. Berkeley RAIL's BridgeData provides shared robot data, training code and access conditions used through documented external data-format workflows.

Evidence scope. Evidence covers the RAIL activity within BAIR; shared Open X-Embodiment data events are cross-referenced without duplicate counting.

Sources: I043:S1 · I043:S2 · I043:S3 · I043:S4

XbotPark [I044]

Startup manufacturing support

Selection. XbotPark provided startup funding support to Narwal, as described alongside direction-finding assistance in HKCRC material.

Evidence scope. HKCRC's account describes XbotPark funding support to Narwal, whose products and operating results retain company attribution.

Sources: I044:S1 · I044:S2 · I044:S3

Zhejiang University Robotics Research [I045]

Robotics education

Selection. Zhejiang University provided robotics education using two Jueying robots brought by project leader Zhu Qiuguo for a completed course in September 2021.

Evidence scope. EDP course record dated 2021-09-25 to 2021-09-26; evidence covers demonstration and interaction, with learning effects unmeasured.

Sources: I045:S1 · I045:S2 · I045:S3 · I045:S4