

B2AGI

PHYSICAL AI 2027

A Decision Reference for Institutions

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PHYSICAL AI 2027

INTELLIGENCE

PHYSICAL

CAPITAL

TRUST

BEYOND

B2AGI

For those who allocate capital,
lead industries,
and shape the future
of nations.

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PHYSICAL AI 2027

A Decision Reference for Institutions

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B2AGI PHYSICAL AI 2027

KOREA / CHINA / UNITED STATES

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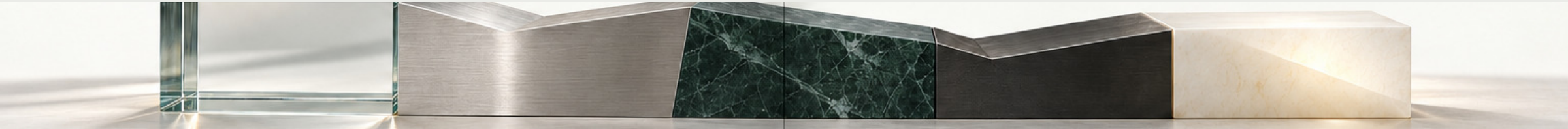
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PART I

From Intelligence to Reality

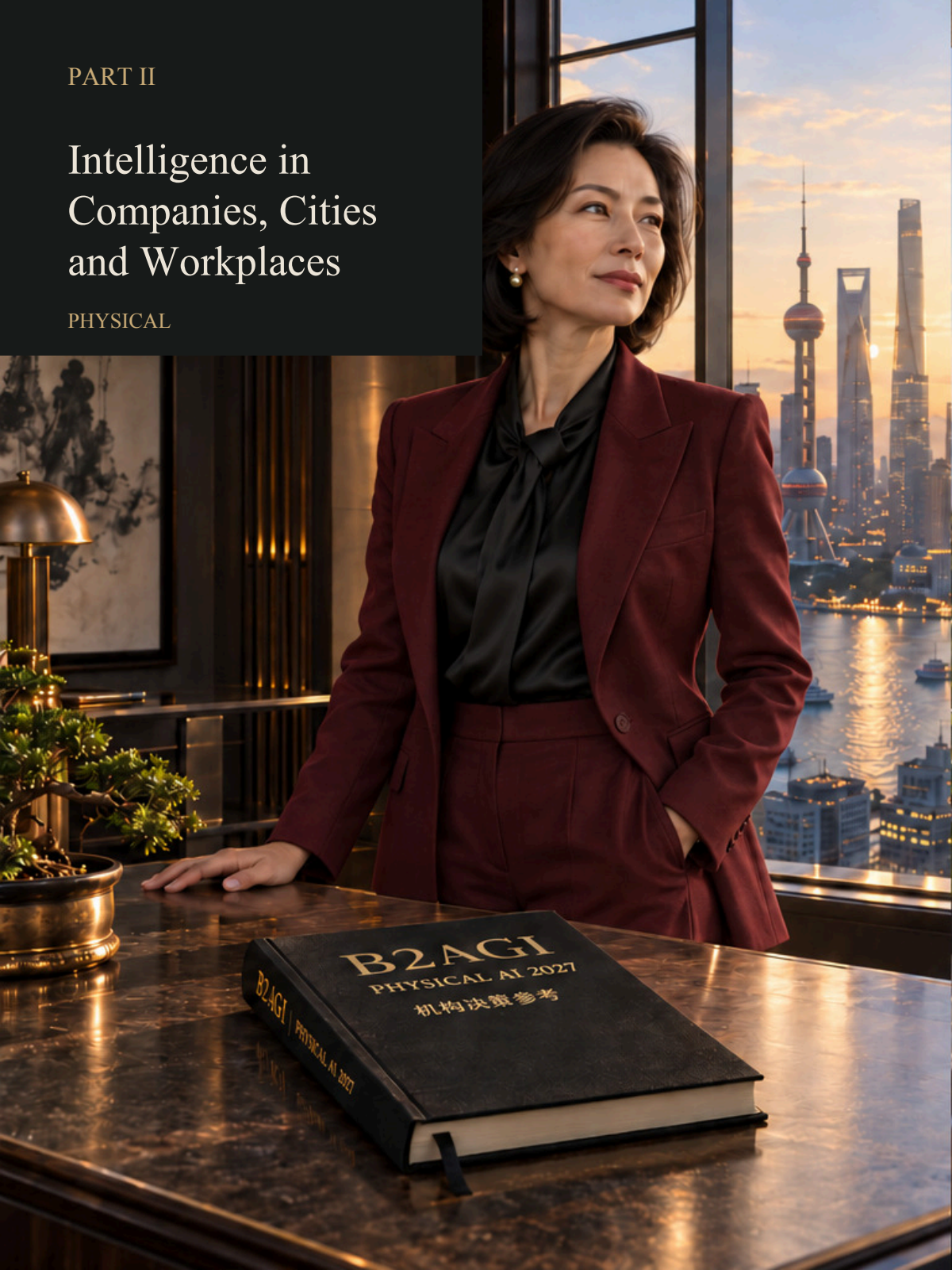
INTELLIGENCE



PART II

Intelligence in Companies, Cities and Workplaces

PHYSICAL



PART III

Who Funds It. Where
Value Stays.

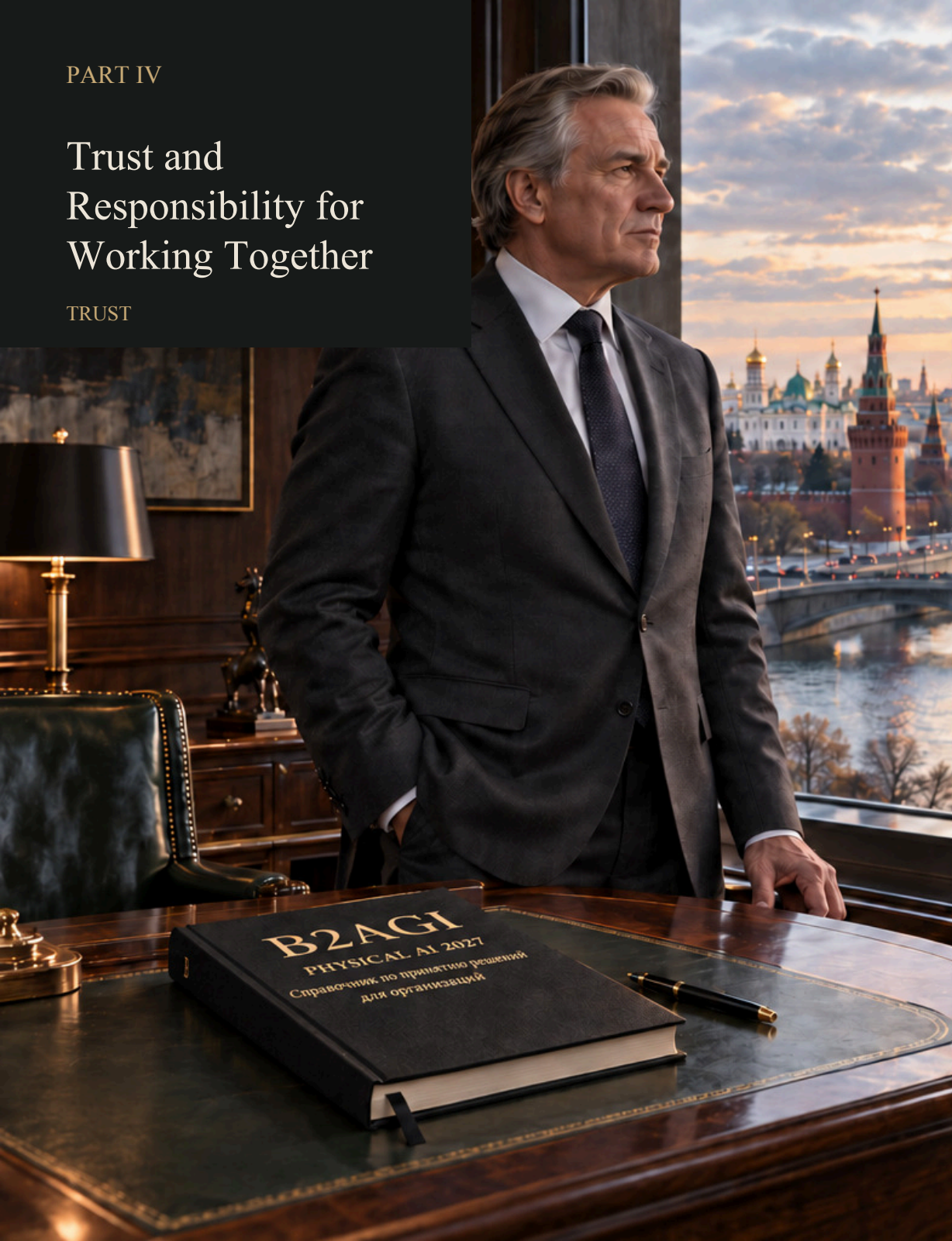
CAPITAL



PART IV

Trust and Responsibility for Working Together

TRUST



PART V

A World Shared by Human and Nonhuman Minds

BEYOND



CHAPTER 02

Choosing the Right Body

The task determines the body.



Change the body, or change the space.

Two designs for completing the same task.

DIFFERENT
BODIES
A SHARED
TOMORROW

DIFFERENT
PATHS
A RICHER
WORLD

01 Adapt the body to the environment

Hardware, control and maintenance

02 Adapt the environment to the body

Construction, downtime and changeover

Compare the total cost of completing the task, not just the equipment price.

Choosing the Right Body

01 / Body and Space: Two Designs

Change the body, or change the space.

Two designs for completing the same task.

Improve the machine, or redesign the space and workflow. Adapting the body brings hardware, control and maintenance costs. Adapting the environment brings construction, downtime and changeover costs. Compare the total cost of completing the task.

02 / From Task to Body

The body is chosen for the work.

Start with force, precision, mobility, the workspace and operating cost. Fixed arms suit repeated actions at known positions; wheels suit flat-floor transport; quadrupeds reach uneven ground. Humanoids use human tools and spaces, with added demands on balance, joints, safety and maintenance.

Vehicles carry weight at speed. Drones reach places difficult to observe from the ground. Account for operating conditions, insurance, battery life and payload. Wearable devices add information or force while the person acts.

Where should the complexity sit?

Separate transport and assembly to combine wheels with a fixed arm. Combine movement and manipulation when objects must be handled on the move. At a staircase, compare a climbing body, a different route and a task assigned to a person. Include downtime, retraining and product changeovers.

Arrival is followed by inspection and handoff. Who checks the result, and what receives the object? The answer shapes sensors and software. Customers buy a body and its connection to their workflow.

03 / Autonomy and Body Complexity

Autonomy and body complexity are separate axes.

Assistive tools reduce training time, errors and variation. In collaborative systems, the division of actions shapes the economics. Directly acting machines need supervision, exception handling and recovery. Exception frequency and handling time determine how many machines one person can oversee.

A fixed arm can work autonomously in a defined space. Walking, manipulation, planning and reasoning are different capabilities. BCG separates programming, visual perception, manipulation, workflow planning and reasoning. Examine how they work together on the task.

04 / The Work at the Customer Site

The movement between existing systems

At the SPANX site described by GXO, Digit transfers totes between mobile equipment and conveyors. Existing heights and spacing shape the work. Reliable, repeated handoffs are the test of the body.

Review the task, surrounding equipment, completion criteria and human intervention. Shipment supplies a machine; installation connects it to the site; inspection and acceptance confirm the agreed conditions. Follow the operating experience through to a repeat purchase.

05 / Compare on the Same Basis

Each number tells a different story.

Shipments show the pace of supply; cumulative shipments show accumulated supply; market size shows business scale. At the customer site, examine work completed, completion frequency, intervention time, maintenance and environmental changes.

Compare fixed arms, wheels, quadrupeds and humanoids on the same task: completion time, human intervention, maintenance and changes to the workspace. Choose the body that completes the work best.

HENRY FIELD / 01

Hangzhou, From Body to Task

8 September 2026 · Henry Chan Jung · B2AGI

Hangzhou Embodied Intelligence Exhibition
& Application Promotion Center



Many bodies, one exhibition. Start the choice with the work.



A headset wearer adjusts the robot's arms and posture.

HENRY FIELD / HANGZHOU

01 / Define the work

What object, in what place? Derive hand precision, arm reach and movement routes from the task.

02 / Examine how it learns

How will human actions be transferred? Examine control devices, the workspace and the data used for learning.

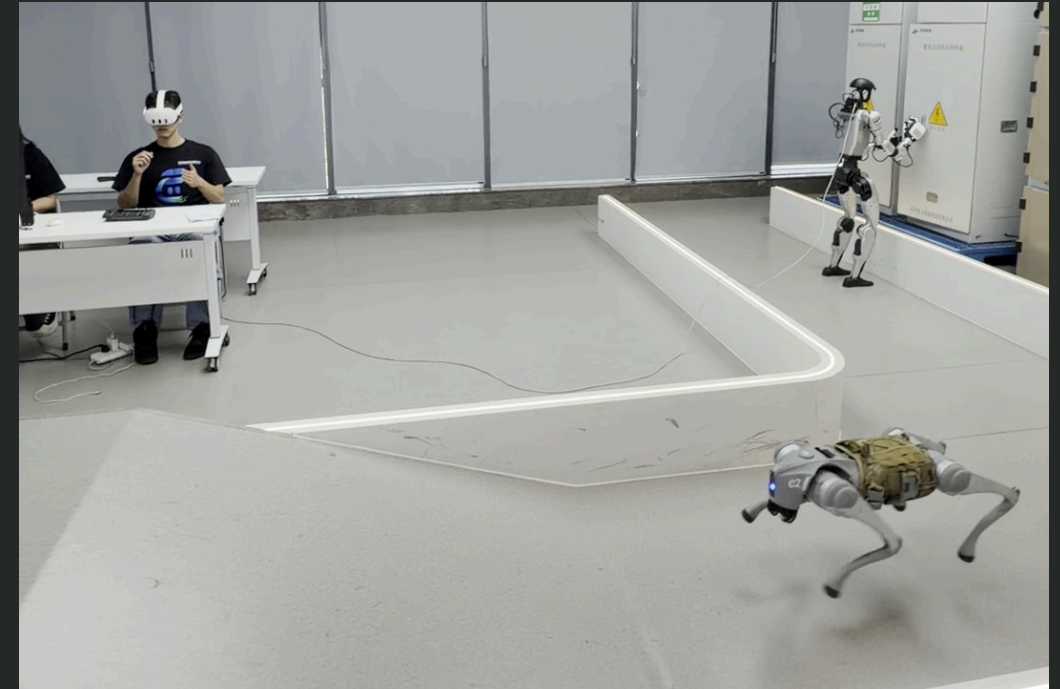
03 / Set completion criteria

How accurately and how often must it finish? Check processing time and human intervention on the same task.

01

TASK / WORKSPACE / LEARNING

Choose a body, and define how to teach and validate it.



An operator and an airborne quadruped; a humanoid at an electrical cabinet. Control positions and the connection between hand and tool inform the choice of body.



Arm, crop and collection space

HENRY FIELD / HANGZHOU

From task to body

Cabinet controls, crop height and travel routes: define the conditions first, then choose hands, tools and the body.

Alongside machine performance,
assess the ability to teach and validate our work.

Photos & video · Henry Chan Jung · B2AGI



FIELD VIDEO / 1 MIN

02

B2AGI ATLAS

Coordinates of the Physical AI World

The Physical AI World Index



NATIONAL COMPETITIVENESS / TOP 20

01 United States

02 China

03 South Korea

- | | | | |
|----|----------------|----|----------------------|
| 04 | Japan | 11 | Denmark |
| 05 | Germany | 12 | Sweden |
| 06 | United Kingdom | 13 | Singapore |
| 07 | Switzerland | 14 | Netherlands |
| 08 | France | 15 | Israel |
| 09 | Canada | 16 | Australia |
| 10 | Taiwan | 17 | Italy |
| | | 18 | Spain |
| | | 19 | Norway |
| | | 20 | United Arab Emirates |

CITY & CLUSTER COMPETITIVENESS / TOP 20

01 Shenzhen-Dongguan

China / Pearl River Delta

02 San Francisco Bay Area

United States

03 Shanghai-Hangzhou-Suzhou

China / Yangtze River Delta

- | | | | |
|----|-----------------------------------|----|---|
| 04 | Beijing Region (China) | 11 | Zurich Region (Switzerland) |
| 05 | Seoul Capital Area (South Korea) | 12 | Singapore (Singapore) |
| 06 | Greater Boston (United States) | 13 | Odense (Denmark) |
| 07 | Pittsburgh Region (United States) | 14 | Seattle Region (United States) |
| 08 | Munich Region (Germany) | 15 | Aichi Manufacturing Region (Japan) |
| 09 | Tokyo-Yokohama Core (Japan) | 16 | London Core (United Kingdom) |
| 10 | Stuttgart Region (Germany) | 17 | Waterloo Core (Canada) |
| | | 18 | Daejeon Core (South Korea) |
| | | 19 | Pohang Robotics & Manufacturing (South Korea) |
| | | 20 | Austin Region (United States) |



PHYSICAL AI 100

2027

KOREA · CHINA · UNITED STATES

C001

42dot

Bus booking platform

C002

AGIBOT

G2 factory manipulation

C004

Agility

Tote handoffs to conveyors

C005

amazon

Order fulfilment

C006

ambi
ROBOTICS

Parcel sorting

C007

AMP

Recycling sorting

C009

Applied Intuition

Vehicle simulation & testing

C010

A22
AUTONOMOUS

Supervised shuttle service

C011

Baidu 百度

Driverless ride service

C012

BEDROCK

Autonomous excavation

C013

BERKSHIRE
GREY

FedEx logistics automation

C101

BlackRock

Robotics investment funds

C015

BOOSTER

Research robot platforms

C016

Boston Dynamics

Truck unloading

C017

brain
corp

Route-learning floor care

C018

BUILT
ROBOTICS

Solar pile construction

C019

BURRO

Farm transport

C020

CARBON
ROBOTICS

Laser weeding

C021

CATL

Robot batteries & factory use

C022

COGNEX

Industrial visual inspection

C023

CORVUS
ROBOTICS

Drone inventory checks

C024

coupang

Robot-human fulfilment

C025

Covariant

Warehouse manipulation

C026

DEEP Robotics
云深处科技

Power-tunnel inspection

C027

元戎启行
DEEPROUTE.AI

Production-car driving assistance

PHYSICAL AI INFLUENCE 50

50 PEOPLE SHAPING PHYSICAL AI

2027

P001



Abhinav Gupta

US / CMU

Links exploration and learning.
P006

P002



Anca Dragan

US / Google DeepMind

Studies robot plans and AI safety.
P007

P003



Andrea Thomaz

US / Diligent Robotics

Builds hospital transport robots.
P008

P004



Chen Jianyu

China / Tsinghua IIS

Studies robot locomotion.

P005



Chris Urmson

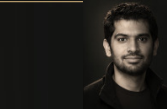
US / Aurora

Leads autonomous trucking.



Daniela Rus

US / MIT CSAIL

Studies human-robot teamwork.
P011

Deepak Pathak

US / Skild AI / CMU

Builds general robot models.
P012

Euisun Chung

South Korea / Hyundai

Links robots and industry capital.
P013

Geordie Rose

Canada / Sanctuary AI

Co-founded Sanctuary AI.



Gill Pratt

Japan / Toyota

Links robots and vehicle research.
P015

Hod Lipson

US / Columbia

Studies robot self-modeling.
P016

Jeff Cardenas

US / Apptronik

Connects Apollo to factory trials.
P017

Jensen Huang

US / NVIDIA

Builds shared robot platforms.
P018

Jonathan Hurst

US / Agility / OSU

Links biomechanics and bipeds.
P019

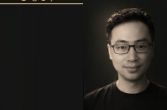
Karol Hausman

US / Physical Intelligence

Links action models and robots.
P020

Ken Goldberg

US / UC Berkeley / Ambi

Links manipulation and learning.
P021

Linxi Fan

US / NVIDIA

Studies robot reinforcement learning.
P022

Marc Raibert

US / RAI Institute

Studies dynamic robot learning.
P023

Masayoshi Son

Japan / SoftBank Group

Connects capital to robotics.



Melonee Wise

US / KUKA Software & AI

Leads robot software products.
P025

Nick Paine

US / Apptronik

Designs actuators and control.



Oussama Khatib

US / Stanford University

Studies underwater robot control.



Park Jong Hoon

South Korea / Neuromeka

Brings cobots to manufacturers.



Peng Zhihui

China / AgiBot

Links robot design and engineering.



Rodney Brooks

US / Robust AI

Builds behavior-based control.

PHYSICAL AI INSTITUTIONS 50

2027

I001	I002	I003	I004	I005
ARM Institute	A3	ASTM F45	BIGAI	CESI
United States	United States	US / International	China	China
Membership, project calls and workforce programs	Industrial and mobile robot safety standards	Automation standards development	RoboVerse code and training documentation	Machine-vision certification services
I006	I007	I008	I009	I010
CMU Robotics Institute	DARPA SubT	DFKI Robotics Innovation Center	ETRI	euRobotics
United States	United States	Germany	South Korea	European Union
Robotics degrees and professional education	2021 SubT challenge tasks and results	Research collaboration and institute contacts	Technical advice and shared equipment	Membership and robotics Topic Groups
I011	I012	I013	I014	I015
FAA	Harvard Wyss Institute	HIT	HKEX / HKSCC	IEC
United States	United States	China	Hong Kong	International
Commercial drone rules and waiver routes	Industry collaboration and technology licensing	Robotics lab collaboration calls	Issuer listing rules and application guides	Robotic mower safety: IEC 60335-2-107
I016	I017	I018	I051	I020
IFR	ISO/TC 299	KAIST	Shanghai Stock Exchange	KEIT
International / Germany	International / Sweden	South Korea	China	South Korea
World Robotics data and definitions	Robot standards and committee activities	Faculty and lab industry connections	Stock trading rules and revisions	Industrial R&D program search
I053	I022	I023	I024	I025
New York Stock Exchange / NYSE	KIAT	KIRIA	KITECH	KTL
United States	South Korea	South Korea	South Korea	South Korea
Issuer listing consultation	Industrial technology support calls	Certified robot model records	Technology advice and testing support	Robot standards and functional-safety courses

INTELLIGENCE

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