

11/26 (Thu) 9:00~16:40 UoA Joint Research Forum 2026

Organizer : The University of Aizu
CAIST
AI Center
ARC-Space



The Widespread Expansion of AI Agents and Physical AI: Industry–Academia Responses toward the Era of Self-Improving AGI
–New Roles of Universities and Industry in a Society Where Intelligence and Physical Entities Converge–



↑ Latest Info

VENUE AUDITORIUM, the University of Aizu

No advance registration required.
Please come directly to the venue on the day of the event.

Part 1: Research Center & Cluster Achievements Presentation **Where We Are Now: Innovations at the University of Aizu**

09:00 - Opening Remarks Chairperson of the Board of Executives / President, the University of Aizu TSUKAHARA Tsuneo

09:05 - 09:55 **Research Center Presentations**
Toward the Realization of Image Recognition Technologies that Contribute to Human Life [ARC-Vision] OKUYAMA Yuichi
Software Engineering for Robotics: Testing by Both Simulated and Actual Robots [ARC-Robot] NARUSE Keitaro
Three Leads by ARC-Space: Archived Data Science for Lunar and Planetary Explorations, Deep Space Missions, and Hakoniwa Program [ARC-Space] DEMURA Hirohide
Q & A

09:55 - 10:05 **Break**

10:05 - 11:25 **Basic-Cluster Presentations**
From Local Communities to Space: Shaping the Future with Edge AI [ARC-edgeAI] TOMIOKA Yoichi
Research of 3D Geological Map Construction Method using the Related Space Exploration Rover Technologies [Space Exploration Technology] YAMADA Ryuhei
B5G and 6G Non-Terrestrial Networks: Architectures, Technologies, and Future Directions [Integrated Computation-Communication pLatform] PHAM Tuan Anh
Knowledge Graphs for Next-Generation Transportation [Intelligent Transportation Systems] RAGE Uday Kiran
From Society 5.0 to Industry 5.0: Autonomous Data Science Grounded in Verified Knowledge [Automatic AI System Design] T. H. Akila S. Siriweera
Q & A

11:25 - 12:25 **Basic-Cluster Poster Presentations**
• Smart Design - A Knowledge-Centered Human-Computer Collaboration [Smart Design] YOSHIOKA Rentaro/KOHIRA Yukihide/NISHIDATE Yohei
• Convergence of AI and Cybersecurity: Building Trust in Intelligent Systems [Information Security] NAKAMURA Akihito/SU Chunhua/KACHI Yasuyuki
• Neuromorphic Intelligence for Energy-Efficient and Sustainable Computing [Sustainable Computing] DANG Nam Khanh/SUZUKI Daisuke/WANG Zhishang
• Industry–University Collaboration and Human Resource Development through Data Science [Data Science and Engineering] HASHIMOTO Yasuhiro

concurrent exhibition

Organizer: UoA IEEE Student Branch

Research presentations by graduate students (The Graduate School Fair) Chair : Prof. PAIK Incheon / Prof. SHIN Jungpil



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12:25 - 13:25 **Lunch Break**

Part 2: Invited Speeches & Panel Discussion **Where the World Is Heading: AI and the Future Society**

13:25 - 14:25 **Keynote Speech**  **F-REI Challenge for Research and Development by using Physical Artificial Intelligence**
President, Fukushima Institute for Research, Education and Innovation (F-REI) YAMAZAKI Koetsu

14:25 - 15:05 **Special Speech1**  **Engineering Trust into Autonomous Intelligence**
— Intelligence × Integrity for AI Agents and Physical AI —
Founder & Representative, MH2 (Modular Hub for Intelligence and Integrity) HISADA Masayuki

15:05 - 15:45 **Special Speech2**  **Toward a Foundational Model That Incorporates Bio-derived Signals**
Professor, Institute of Engineering Division of Electrical Engineering and Computer Science,
Tokyo University of Agriculture and Technology
TANAKA Toshihisa

15:45 - 16:35 **Panel Discussion**
The Widespread Expansion of AI Agents and Physical AI:
Industry–Academia Responses toward the Era of Self-Improving AGI
–New Roles of Universities and Industry in a Society Where Intelligence and Physical Entities Converge–

HISADA Masayuki • TANAKA Toshihisa
Representative Director, Mamorie Co., Ltd.
TANAKA Tomoya
Chair : Prof. SAITO Hiroyuki

- 16:40 **Closing Remarks**

Dean of Graduate School PAIK Incheon

Participation is free of charge

Language:
Japanese (Partially in English) / No interpretation

<Contact Us>

Planning Section, Planning and Collaboration Division
Phone : 0242 - 37 - 2510 E-mail : cl-planning@u-aizu.ac.jp

UoA Joint Research Forum 2026 Outline

The Widespread Expansion of AI Agents and Physical AI : Industry–Academia Responses toward the Era of Self-Improving AGI

– New Roles of Universities and Industry in a Society Where Intelligence and Physical Entities Converge –

A previous Joint Research Forum explored the potential of AI agents based on large language models (LLMs) from multiple perspectives. Today, AI is evolving beyond a technology that processes information in a digital space into “Physical AI,” which is capable of autonomous perception, decision-making, and action in the real world through applications such as robotics, manufacturing, mobility, and social infrastructure. With the widespread expansion of AI agents and Physical AI across diverse domains, a society where intelligence and physical entities are integrated is no longer a distant vision, but an ongoing transformation.

While these changes are bringing improved productivity and creating new value, they demand a major transformation of industry, work styles, human resource development, and the roles of universities and industry. As we move toward an era of self-evolving artificial general intelligence (AGI), collaboration across disciplines and organizations will be essential to translate technological progress into social value. In this forum, we will share the current state of our university through presentations on the latest research from our university research center. Further, through invited lectures and panel discussions, we will discuss the social transformations brought about by AI as well as the new roles to be played by universities and industry.

Invited Speaker Profiles

YAMAZAKI Koetsu

Born in Oyabe City, Toyama Prefecture, Yamazaki completed a master's program in engineering at Kanazawa University and earned a Doctor of Engineering degree from Osaka University. After holding a number of senior positions, including President of Kanazawa University, he was appointed the inaugural President of the Fukushima Institute for Research, Education and Innovation (F-REI) in April 2023. Under his leadership, F-REI is pursuing its vision of becoming a driving force for science, technology, and innovation in Japan and a world-leading hub for creative reconstruction.

HISADA Masayuki

Hisada is the Founder of MH2 and a Visiting Professor at the University of Aizu. A member of the University of Aizu's first class and one of its first doctoral graduates, he founded Aizu Lab (acquired by a TSE-listed company in 2014) and the Aizu Computer Science Laboratory. He now focuses on AI governance and hardware security, enveloping technologies that engineer trust into autonomous AI. He is an IEEE Senior Member and an IEEE CS Distinguished Visitor (2026–2028).

TANAKA Toshihisa

Tanaka graduated from the Tokyo Institute of Technology with a degree in Electrical and Electronic Engineering in 1997, and obtained the Ph.D. at that same university in 2002. After serving as a researcher at the RIKEN Institute, he joined the Tokyo University of Agriculture and Technology in 2004, where he is currently a Professor and Trustee.

His research focuses on signal processing, machine learning, and biometrics, as well as their applications. From 2017 to 2023, he served as the Principal Investigator for the JST CREST Artificial Intelligence research area. Since 2024, he has served as the Principal Investigator for the JST CRONOS research program. He currently serves as Chair of the IEEE Signal Processing Society Tokyo Joint Chapter, General Chair of IEEE ICASSP 2028, and Senior Area Editor for IEEE Signal Processing Letters.

TANAKA Tomoya

Tanaka holds a B.A. in Economics from Kyoto University and an M.S. in Computer Science (specializing in Artificial Intelligence) from the Georgia Institute of Technology. At the Ministry of Economy, Trade and Industry (METI), he engaged in policy development and was also posted to China. At SoftBank, he worked on the social implementation of autonomous driving, as well as R&D in AI models and radio-wave sensing technologies. In May 2026, he founded Mamorie Inc. to develop and implement an early anomaly detection system for wooden houses.



Research Center & Cluster Achievements Presentation Keywords



Archived Data Science for Lunar and Planetary Explorations / Cyber-Physical Systems / Agentic AI / Machine Learning / Circuit Design / Pattern Recognition / High-Dimensional Data Visualization / Creative Support Systems / Big Data / Remote Sensing / Cybersecurity / Pattern Mining / AI Edge Devices / Neuromorphic AI / Medical Engineering / Data Science / High-Performance Computing / Quantum Computing Applications / 6G Network Computing / Smart Design / Industry-Academia Collaboration / Cooperative Research