

Keisuke Ueda

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Research Interests: Multi-Agent Systems, AI Forecasting, AI for Science, Medical Machine Learning

EDUCATION

EPFL <i>Master (Major: Data Science); GPA: 5.4/6.0</i>	Lausanne, Switzerland <i>Expected 2027</i>
University of Tokyo <i>Bachelor (Major: Informatics); GPA: 3.5/4.0</i>	Tokyo, Japan <i>2024</i>
<i>Exchange at ETH Zurich, Zurich, Switzerland (Major: Computer Science)</i>	<i>2023</i>

PUBLICATIONS

[1] **What Should We Forecast? Benchmarking Agents on Early Question Discovery**
Keisuke Ueda, Veniamin Veselovsky, and Robert West.
AI Forecasting Workshop @ ICML 2026.

[2] **Exploring the Design of Multi-Agent LLM Dialogues for Research Ideation**
Keisuke Ueda, Wataru Hirota, Takuto Asakura, Takahiro Omi, Kosuke Takahashi, Kosuke Arima, and Tatsuya Ishigaki.
Special Interest Group on Discourse and Dialogue (SIGDIAL), 2025.

[3] **Real-Time Integration of Optical Coherence Tomography Thickness Map Overlays for Enhanced Visualization in Epiretinal Membrane Surgery: A Pilot Study**
Ferhat Turgut, Keisuke Ueda, Amr Saad, Tahm Spitznagel, Luca von Felten, Takashi Matsumoto, Rui Santos, Marc D. de Smet, Zoltán Zsolt Nagy, Matthias D. Becker, and Gábor Márk Somfai.
Biomedical Applications of Optical Coherence Tomography, Second Edition, 2025.

[4] **Pioneering AI in surgery: Deep learning for scene recognition in laparoscopic hysterectomy**
Giovanni Ruggeri, Naoki Ito, Keisuke Ueda, Mineto Fujisawa, Daiki Hiratsuka, Takashi Matsumoto, Michael Mueller.
European Journal of Obstetrics and Gynecology and Reproductive Biology, 2025.

RESEARCH EXPERIENCE

Data Science & AI Lab (dLab), EPFL <i>Research Project (Supervisors: Prof. Robert West, Dr. Veniamin Veselovsky)</i> Research on future forecasting using LLM agents.	Lausanne, Switzerland <i>Feb 2026 – Present</i>
AI Research Center, National Institute of AIST <i>Research Intern at LANIRT (Supervisors: Prof. Hiroya Takamura, Dr. Tatsuya Ishigaki)</i> - Conduct research on NLP and large language models, with a focus on multi-agent LLM dialogue design for research ideation. - Contributed to a SIGDIAL 2025-accepted study on evaluating how agent roles and interaction protocols affect ideation quality and diversity. [2]	Tokyo, Japan <i>Jun 2025 – Present</i>
SPRING Lab, EPFL <i>Research Project (Supervisors: Prof. Carmela Troncoso, Dr. Ana-Maria Cretu)</i> Researched computer vision & privacy (perceptual-hash inversion using diffusion models).	Lausanne, Switzerland <i>Aug 2024 – Jan 2025</i>

INDUSTRY EXPERIENCE

Kiwami AI <i>Co-Founder</i> - Built and deployed an LLM-assisted workflow to draft and streamline clinical referral letters, adopted across multiple clinics. - Developed an internal clinic chatbot system to support staff workflows and reduce administrative overhead.	Tokyo, Japan <i>Nov 2024 – Jun 2025</i>
Turing Inc. <i>Engineering Intern (Full-time)</i> Contributed to the early development of Terra, Turing’s generative world model for autonomous driving.	Tokyo, Japan <i>Jul 2024 – Aug 2024</i>

- Supported data and evaluation workflows for controllable driving-scene generation, enabling simulation of rare and safety-critical scenarios.

Medical Dataway AG

Zurich, Switzerland

Machine Learning Engineer (Full-time)

Oct 2023 – Jul 2024

- Co-led R&D collaborations with multiple Swiss hospitals, translating clinical requirements into ML prototypes and research deliverables.
- Co-authored two journal-accepted papers on AI for medical imaging and surgery; presented posters at ARVO 2024 (Seattle) and Hamlyn Symposium on Medical Robotics 2024 (London), receiving a Runner-up Poster Award at Hamlyn. [3] [4]

UTokyo Economic Consulting Inc.

Tokyo, Japan

Data Analyst Intern (Part-time)

Nov 2020 – Apr 2022

- Contributed to a joint product development with Nikkei Inc. (The Nihon Keizai Shimbun), owning a large portion of the implementation for a high-frequency daily economic indicator. ([Product](#), [Technical Report](#))
- Built NLP pipelines using classical word embedding models for news article sentiment analysis, and forecasting models over long-horizon news data to deliver timely macroeconomic signals updated every morning.

AWARDS

Microsoft LLMail Inject Competition: Top 13 team out of over 200. (Feb 2025)

Meta Llama Hackathon 2024: Finalist (Top 6 team out of over 60). (Sep 2024)

JASSO Scholarship: Granted one year of stipend. (Sep 2022 – Aug 2023)