Jul 2021 - Dec 2021

Kei Katsumata

♥ Tokyo, Japan 🖾 ke59ka77@keio.jp 🞓 Google Scholar in LinkedIn 🕠 agate106k

Education

Keio University, Kanagawa, Japan	
Master of Open and Environmental Systems in Computer Science	Mar 2025 - Present
Keio University, Kanagawa, Japan	
Bachelor of Science and Engineering in Computer Science	Apr 2021 – Mar 2025
Seikei High School, Tokyo, Japan	Apr 2018 – Mar 2021
Experience	
Keio University, Research Assistant	Jan 2025 – Present
CyberAgent, Inc. (ABEMA Ad), Backend Engineer Internship	Nov 2023 – Dec 2023
DMM.com LLC (DMM TV), Backend Engineer Internship	Aug 2023 – Sep 2023
looking up Inc., Full Stack Engineer Internship	Jan 2023 – Feb 2024
Keio Univ. AI & Advanced Programming Consortium, Education Internship	Jun 2022 – Mar 2024
Coconala Inc., Data Science Internship	Jun 2021 – Apr 2023

Publications

Journal

Kei Katsumata, Motonari Kambara, Daichi Yashima, Ryosuke Korekata, Komei Sugiura,

"Mobile Manipulation Instruction Generation From Multiple Images With Automatic Metric Enhancement," *IEEE Robotics and Automation Letters (IEEE RA-L)*, Vol. 10, No. 3, pp. 3022–3029, 2025.

International Conferences

HAIT Lab (Standard Inc.), Project Lead (6th Term)

Kei Katsumata, Yui Iioka, Naoki Hosomi, Teruhisa Misu, Kentaro Yamada, Komei Sugiura,

"GENNAV: Polygon Mask Generation for Generalized Referring Navigable Regions," Conference on Robot Learning (CoRL), 2025. Acceptance rate: 35.8%. Project Page

Kei Katsumata, Motonari Kambara, Daichi Yashima, Ryosuke Korekata, Komei Sugiura,

"Mobile Manipulation Instruction Generation From Multiple Images With Automatic Metric Enhancement," *IEEE RA-L*, to be presented at *ICRA 2026*, Vienna, Austria.

Scholarships

Hoshizaki Shinsei Foundation Scholarship, JPY 3,360,000	Apr 2025 – Mar 2027
Repayment Exemption of JASSO Scholarship (Category 1), JPY 2,112,000	Apr 2025 – Mar 2027

Projects

Sake Recommadation App (in progress)

2025 -

o Designing application specs and search algorithms to promote Japanese sake globally. (To appear)

Sanah - Engagement Management Platform

2022 - 2023

• Full-cycle ownership (schema & infra design, frontend/backend, ops & sales) of a TS/NestJS/AWS product adopted by multiple companies.

Career Site "ATLAS" (now "CareerPod")

2021 - 2022

• Helped launch a career platform supporting students from freshmen to job seekers (slow job-hunting concept).

Leadership & Community

Crich - Representative

2021 - 2023

 \circ Scaled a student community to \sim 50 members; organized 81 events (6,000+ attendees), incl. a 240-person paid event at Tokyo International Forum; led external partnerships with dozens of companies; total media users 60,000+.

HAIT Lab - 6th Term Representative

2021

o Led Japan's largest student ML engineer community initiatives; organized events for 80+ university students.

Skills

Programming Languages Python, TypeScript, Go, C#, SQL, PHP, Java, GAS, C/C++, Ruby, LaTeX Software Tools: ML&Data (PyTorch, BigQuery, Databricks), Robotics (CARLA, AirSim, IssacSim, ROS, Gazebo), Python libraries (NumPy, OpenCV, SciPy, matplotlib, etc), Git, GitHub/GitLab, Docker, AWS, GCP, Cursor Languages: Japanese (Native), English, German

Additional

International Background: 10 years in Germany; strong intercultural communication.

Research Interests: Vison and Language, Autonomous Driving, 4D/3D.

Interests: Live music enthusiast (attend $\sim 40 \text{ shows/year}$).