

Yusuke Oumi

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Education

Keio University, Yokohama, Japan

Sep 2025 – Current

PhD in Computer Science

- **Advisor:** Dr. Mariko Isogawa
- **Research Interests:** Human Motion, Low-level Signal Sensing

Keio University, Yokohama, Japan

Apr 2024 – Sep 2025

Master in Computer Science

- **Advisor:** Dr. Mariko Isogawa
- **Master Thesis:** Sound-based Multi-Person Pose Estimation

Keio University, Yokohama, Japan

Apr 2020 – Mar 2024

Bachelor in Computer Science

- **Advisor:** Dr. Mariko Isogawa
- **Undergrad Thesis:** Sound-based Human Pose Estimation

Research Experience

Keio University Bachelor's, Master's, and PhD Student at Isogawa Laboratory

Feb 2023 – Current

NTT, Inc. Collaborative Research

Mar 2023 – Current

Publications

- **Yusuke Oumi**, Yuto Shibata, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “Sound-based Multi-Person 3D Pose Estimation”, European Conference on Computer Vision (ECCV), 2026
- Yuto Shibata, **Yusuke Oumi**, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “BGM2Pose: Active 3D Human Pose Estimation with Non-Stationary Sounds”, IEEE Open Journal of Signal Processing (OJSP), 2026.
- **Yusuke Oumi**, Yuto Shibata, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “Acoustic-based 3D Human Pose Estimation Robust to Human Position”, British Machine Vision Conference (BMVC), 2024

Presentations

- **Yusuke Oumi**, Yuto Shibata, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “Multi-Person 3D Pose Estimation with Acoustic Signals”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2025
- Yuto Shibata, **Yusuke Oumi**, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “Universal Human Pose Representation for Multi-Modal Active Sensing”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2025
- **Yusuke Oumi**, Yuto Shibata, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “3D Human Pose Estimation Using Acoustic Signals Robust to Human Position”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2024
- Yuto Shibata, **Yusuke Oumi**, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “BGM2Pose: Active 3D Human Pose Estimation with Background Music”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2024

Awards

- [MIRU Excellence Award (Top-2)] Yuto Shibata, **Yusuke Oumi**, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “Universal Human Pose Representation for Multi-Modal Active Sensing”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2025
- [Best Award, Young Researcher Program (Top-1)] **Yusuke Oumi** et al., “Group6: Signal Processing” (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2025

- [MIRU Interactive Presentation Award (Top 4%)] Yuto Shibata, **Yusuke Oumi**, Go Irie, Akisato Kimura, Yoshimitsu Aoki, Mariko Isogawa., “BGM2Pose: Active 3D Human Pose Estimation with Background Music”, (in Japanese), Meeting on Image Recognition and Understanding (MIRU), 2024

Grants

Kenkyu no Susume Scholarship

¥300,000 /year

Apr. 2026 – Mar. 2027

Keio-BOOST

¥3,600,000 /year + ¥300,000 research fund

Oct. 2025 – Sep. 2028

Certifications

Applied Information Technology Engineer Examination

Dec. 2025