Yushi Ogiwara

Doctoral course student at Keio University
Email: yushiogiwara@keio.jp

INTERESTS

- **Database Transaction Systems**
- **GPU Acceleration**
- **Machine Learning**
- **Robotics**

PEER REVIEWED PUBLICATIONS

- Y. Ogiwara and H. Kawashima, “Accelerating Transformer on GPUs with Sparse Ternary Weight Matrix”, in *ACM Asia-Pacific Workshop on Systems (APSys)*, 2024 (poster).
- Y. Ogiwara and H. Kawashima, “Extending ROS Transform Library for Massive Autonomous Robots”, in *IEEE International Conference on Embedded and Real-Time Computing Systems and Applications(RTCSA’23),* 2023 (poster).
- Yushi Ogiwara, Ayanori Yorozu, Akihisa Ohya, Hideyuki Kawashima: Transactional TF: transform library with concurrency and correctness, IEICE Transactions on Information and Systems announces, Special Section on Forefront Computing 2023.12
- Y. Ogiwara, A. Yorozu, A. Ohya, and H. Kawashima, “Transactional Transform Library on ROS,” in *2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (***IROS, H5-index=80***),* 2022.
- Y. Ogiwara, A. Yorozu, A. Ohya, and H. Kawashima, "Making ROS TF Transactional,” in *2022 ACM/IEEE 13th International Conference on Cyber-Physical Systems (ICCPS)*, 2022, pp. 318-319

NON-PEER REVIEWED PUBLICATIONS

- Y. Ogiwara and H. Kawashima, “重み行列の三項値化におけるGPU上での高速化”, in xSIG2024 (In Japanese).
- Y. Ogiwara and H. Kawashima, “ROS TF for huge-scale device management”, in xSIG2023 (In Japanese).
- Y. Ogiwara, A. Yorozu, A. Ohya, and H. Kawashima, “ROS TF のトランザクショナル設計とタイムライン破損,” in SIGOS2023 (In Japanese).
- Y. Ogiwara, A. Yorozu, A. Ohya, and H. Kawashima, “Making ROS TF high quality by concurrency control method,” in ETNET2022 (In Japanese).

- Y. Minami, T. Suzuki, T. Yamakura, I. Kamae, Y. Oikawa, Y. Ogiwara, H. Kawashima, H. Date, A. Yorozu, "Tsukuba Challenge 2021: Team Aqua, Intelligent Robotics Laboratory, University of Tsukuba", in SI2021 (In Japanese).

STUDENT SCHOLARSHIP

- **Research Fellowship for Young Scientists (DC1) — Apr 2024-Mar 2027**

Japan Society for the Promotion of Science, 9.2M JPY

- **Young Leader Scholarship — Apr 2024**

The Tokyo Foundation for Policy Research, 1M JPY

TEACHING

- **Mathematical optimization — Apr 2024-Jul 2024**

Keio University

AWARDS

- **SFC Outstanding Graduation Project — 2022**
- **Information Processing Society of Japan SIGOS Outstanding Young Presentation — 2022**

MEDIA

"Accelerating the Power of Data System" — 2023
https://www.sfc.keio.ac.jp/gsmg/en/education/gstudent-research/ci_ogiwara.html

EXPERIENCES

Tsukuba robot competition — 2021
I participated in the Tsukuba robot competition and worked on autonomous driving using ROS.

Chief Technical Officer, Penmark.inc; Tokyo, Japan — 2018-2020
I created multi-platform mobile applications using Flutter framework as the front-end and Google Cloud Platform as the back-end.

Web frontend software engineer, Ubie.inc; Tokyo, Japan — 2018
I was scouted as a web frontend software engineer and worked on medical analysis software using React and Ruby on Rails frameworks.

Web backend software engineer, Preapp Co., Ltd; Kanagawa, Japan — 2017-2018
I was hired as a web backend software engineer and worked on the e-commerce web application using Laravel framework.

EDUCATION

2018-2022 **Faculty of Environment and Information Studies, Keio University**

Research Topic: Computer science

Research Supervisor: Dr. Hideyuki Kawashima

GPA: 3.55

2022-2024 **Graduate School of Media and Governance, Keio University**

Research Topic: Computer science

Research Supervisor: Dr. Hideyuki Kawashima

GPA: 3.83

2024-Present **Graduate School of Media and Governance, Keio University**

Research Topic: Computer science

Research Supervisor: Dr. Hideyuki Kawashima

SKILLS

Language

Japanese Native

English Competent user.

IELTS Overall 6.5

Programming

Language C, C++, C#, PHP, Python, Ruby, Java, JavaScript, Kotlin, Objective-C, Swift, Scala, TypeScript, and Dart.

Platforms and Frameworks

Vue, React, Angular, Laravel, Ruby on Rails, Phoenix, Android, iOS, React Native, Flutter, Firebase, and Google Cloud Platform.

GitHub https://github.com/Ogiwara-CostlierRain464

SOCIAL MEDIA

Twitter **@yogiwara_study**