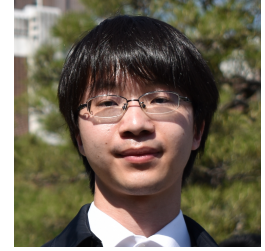


Yuki Takezawa

Website: <https://yukitakezawa.github.io/>
Email: yuki-takezawa@ml.ist.i.kyoto-u.ac.jp
GitHub: <https://github.com/yukiTakezawa>



EDUCATION

Kyoto University

Ph.D. in Informatics, Advisor: Makoto Yamada, Hisashi Kashima

2023–Current

Kyoto University

M.D. in Informatics, Advisor: Makoto Yamada

2021–2023

– Thesis: “Fixed Suppoer Tree-sliced Wasserstein Barycenter”

Kyoto University

B.D. in Informatics, Advisor: Makoto Yamada

2017–2021

– Thesis: “Supervised Tree-Wasserstein Distance”

EXPERIENCE

Okinawa Institute of Science and Technology, Yamada Unit

Visiting research student

2022–Current

Kyoto University, Kashima-Yamada Lab.

Research assistant

2021–2023

RIKEN AIP, High-Dimensional Statistical Modeling Team

Research assistant

2021–2023

NTT Communication Science Laboratories

Internship

Summer 2021

The University of Tokyo, Matsuo Lab.

Internship

2020–2021

PUBLICATIONS

- Beyond Exponential Graph: Communication-Efficient Topologies for Decentralized Learning via Finite-time Convergence**
Yuki Takezawa, Ryoma Sato, Han Bao, Kenta Niwa, and Makoto Yamada.
NeurIPS, 2023.
- Momentum Tracking: Momentum Acceleration for Decentralized Deep Learning on Heterogeneous Data**
Yuki Takezawa, Han Bao, Kenta Niwa, Ryoma Sato, and Makoto Yamada.
TMLR, 2023.
- Large-scale Similarity Search with Optimal Transport**
Cl  a Laouar, Yuki Takezawa, and Makoto Yamada.
EMNLP, 2023.

4. **Communication Compression for Decentralized Learning With Operator Splitting Methods**
Yuki Takezawa, Ryoma Sato, Han Bao, Kenta Niwa, and Makoto Yamada.
IEEE Transactions on Signal and Information Processing over Networks, 2023.
5. **Improving the Robustness to Variations of Objects and Instructions with a Neuro-Symbolic Approach for Interactive Instruction Following**
 Kazutoshi Shinoda, Yuki Takezawa, Masahiro Suzuki, Yusuke Iwasawa, and Yutaka Matsuo.
MMM, 2023.
6. **Approximating 1-Wasserstein Distance with Trees**
 Makoto Yamada, Yuki Takezawa, Ryoma Sato, Han Bao, Zornitsa Kozareva, and Sujith Ravi.
TMLR, 2022.
7. **Fixed Support Tree-Sliced Wasserstein Barycenter**
Yuki Takezawa, Ryoma Sato, Zornitsa Kozareva, Sujith Ravi, and Makoto Yamada.
AISTATS, 2022.
8. **Supervised Tree-Wasserstein Distance**
Yuki Takezawa, Ryoma Sato, and Makoto Yamada.
ICML, 2021.

PREPRINTS

1. **Necessary and Sufficient Watermark for Large Language Models**
Yuki Takezawa, Ryoma Sato, Han Bao, Kenta Niwa, and Makoto Yamada.
arXiv, 2023.
2. **Theoretical Analysis of Primal-Dual Algorithm for Non-Convex Stochastic Decentralized Optimization**
Yuki Takezawa, Ryoma Sato, Han Bao, Kenta Niwa, and Makoto Yamada.
arXiv, 2022.

AWARDS

- | | |
|--|------|
| • The Japanese Society for Artificial Intelligence Incentive Award | 2021 |
| • President's Prize (Kyoto University) | 2021 |
| • ABU Asia-Pacific Robot Contest, Best 8 | 2019 |
| • NHK Robocon, 1st Prize | 2019 |
| • Chopin International Piano Competition in Asia, Bronze | 2016 |

FUNDINGS

- | | |
|---|-----------|
| • JSPS Doctoral Course Research Fellowships | 2023–2026 |
|---|-----------|