Hiroaki Yamagiwa

Ph.D. student, Graduate School of Informatics, Kyoto University, Kyoto, Japan

E-mail: hiroaki.yamagiwa@sys.i.kyoto-u.ac.jp

Profiles: Portfolio — Google Scholar — GitHub — LinkedIn

RESEARCH INTERESTS

Natural Language Processing, Optimal Transport, Computer Vision, Software Engineering

EDUCATION

Kyoto University, Kyoto, Japan

Apr. 2022 — Present

Ph.D. student in Informatics

Kyoto University, Kyoto, Japan Master of Science in Informatics Apr. 2020 — Mar. 2022

Kyoto University, Kyoto, Japan Bachelor of Science in Mathematics

Apr. 2015 — Mar. 2020

EXPERIENCE

Rist Inc.
Research Intern

Kyoto, Japan

Aug. 2023 — Sep. 2023

• We proposed a new zero-shot edge detection method [1] that was accepted at the WACV 2024 workshop.

Kyoto University

Kyoto, Japan

Research Assistant

Apr. 2023 — Present

RIKEN
Part-time Researcher

Remote, Japan Aug. 2021 — Mar. 2022

1 are come necessarience

DATAGRID Inc.
Part-time Engineer

Kyoto, Japan Dec. 2020 — Jul. 2021

• Natural Language Processing Engineer

Rist Inc.

Kyoto, Japan

Part-time Engineer

Sep. 2019 — Present

• Machine Learning Engineer

PUBLICATIONS

(*) denotes equal contribution.

- 1. Hiroaki Yamagiwa, Yusuke Takase, Hiroyuki Kambe, Ryosuke Nakamoto. 2024. Zero-Shot Edge Detection with SCE-SAME: Spectral Clustering-based Ensemble for Segment Anything Model Estimation. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) Workshops, pages 541–551. IEEE.
- Hiroaki Yamagiwa*, Momose Oyama*, Hidetoshi Shimodaira. 2023. Discovering Universal Geometry in Embeddings with ICA. In Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing, pages 4647–4675. Association for Computational Linguistics.
- 3. Hiroaki Yamagiwa, Sho Yokoi, and Hidetoshi Shimodaira. 2023. Improving word mover's distance by leveraging selfattention matrix. In Findings of the Association for Computational Linguistics: EMNLP 2023, pages 11160—11183. Association for Computational Linguistics.

GRANTS

• Kyoto University Science and Technology Innovation Fellowship (Apr. 2022 — Mar. 2025).

SKILLS

• **Programming:** Python, C++, Linux, Docker

Hiroaki Yamagiwa Dec. 2023

Language: Japanese, EnglishKaggle: Competitions Expert

REFERENCES

Prof. Hidetoshi Shimodaira

 $Professor,\ Graduate\ School\ of\ Informatics,\ Kyoto\ University,\ Kyoto,\ Japan$

E-mail: shimo@i.kyoto-u.ac.jp

Profiles: Portfolio — Google Scholar — Git
Hub — Linked In