ATAUMOTO OHASHI

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EDUCATION

Ph.D. Student in Informatics | Nagoya University

APRIL 2023 - PRESENT

• Advised by Prof. Ryuichiro Higashinaka

M.S. of Informatics | Nagoya University

APRIL 2021 - MARCH 2023

- Advisor: Prof. Ryuichiro Higashinaka
- Thesis: Optimizing Task-oriented Pipeline Dialogue Systems via Reinforcement Learning
- GPA: 4.0 on a 4.0 scale

B.S. of Informatics | Nagoya University

APRIL 2017 - MARCH 2021

- Advised by Prof. Ryuichiro Higashinaka
- Thesis: Module-Linked Dialogue System Adapting to Users and Dialogue Situations



SELECTED PUBLICATIONS

(* Equal contribution)

International Conferences (refereed)

- Atsumoto Ohashi, Ryuichiro Higashinaka. "Universal Post-Processing Networks for Joint Optimization of Modules in Task-Oriented Dialogue Systems," The 39th Annual AAAI Conference on Artificial Intelligence (AAAI 2025)
- <u>Atsumoto Ohashi</u>, Ukyo Honda, Tetsuro Morimura and Yuu Jinnai. "On the True Distribution Approximation of Minimum Bayes-Risk Decoding," The 2024 Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2024)
- <u>Atsumoto Ohashi</u>*, Ryu Hirai*, Shinya lizuka and Ryuichiro Higashinaka. "JMultiWOZ: A Large-Scale Japanese Multi-Domain Task-Oriented Dialogue Dataset," The 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)
- <u>Atsumoto Ohashi</u> and Ryuichiro Higashinaka. **"Enhancing Task-oriented Dialogue Systems with Generative Post-processing Networks,"** *The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023)*, pages 3815–3828.
- Ao Guo, <u>Atsumoto Ohashi</u>, Yuya Chiba, Yuiko Tsunomori, Ryu Hirai and Ryuichiro Higashinaka.
 "Personality-aware Natural Language Generation for Task-oriented Dialogue using Reinforcement Learning," The 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023)

- Atsumoto Ohashi and Ryuichiro Higashinaka. "Adaptive Natural Language Generation for Taskoriented Dialogue via Reinforcement Learning," The 29th International Conference on Computational Linguistics (COLING 2022), pages 242–252.
- Atsumoto Ohashi and Ryuichiro Higashinaka. "Post-processing Networks: A Method for Optimizing Pipeline Task-oriented Dialogue Systems using Reinforcement Learning," The 23rd Annual Meeting of the Special Interest Group on Discourse and Dialogue (SIGDIAL 2022), pages 1-13.
- Ao Guo, Atsumoto Ohashi, Ryu Hirai, Yuya Chiba, Yuiko Tsunomori and Ryuichiro Higashinaka. "Influence of user personality on dialogue task performance: A case study using a rule-based dialogue system," The 3rd Workshop on Natural Language Processing for Conversational Al (NLP4ConvAl 2021), pages 263-270.

HONORS AND AWARDS

Young Researcher Encouragement Award (18/406)

MARCH 2023

The 29th Annual Meeting of the Association of Natural Language Processing (NLP2023)

Sponsor Award (5/386)

MARCH 2022

The 28th Annual Meeting of the Association of Natural Language Processing (NLP2022)

Committee Special Award (16/365)

MARCH 2022

The 28th Annual Meeting of the Association of Natural Language Processing (NLP2022)

Outstanding Academic Achievement

APRIL 2018

Department of Computer Science, Nagoya University

Chinese Speech Contest 4th Prize

DECEMBER 2017

Nanjing University Cup, Nagoya University



INVITED TALKS

Towards Understanding Performance Variability in MBR Decoding

JUNE 2024

The 59th NLP Colloquium

EMNLP 2023 Conference Report

DECEMBER 2023

The 14th Dialogue Systems Symposium. The 99th Meeting of Special Interest Group on Spoken Language Understanding and Dialogue Processing (SIG-SLUD99)

SIGDIAL 2022 & YRRSDS 2022 Conference Report

DECEMBER 2022

The 13rd Dialogue Systems Symposium. The 96th Meeting of Special Interest Group on Spoken Language Understanding and Dialogue Processing (SIG-SLUD96)



SCHOLARSHIP AND GRANTS

JSPS Research Fellowship for Young Scientists (DC2)

APRIL 2025 - MARCH 2027

- Research Immersion Support: 200,000 yen / month
- Research Expenses: 800,000 yen / year

Nagoya University Interdisciplinary Frontier Fellowship

APRIL 2023 – MARCH 2026

- Research Immersion Support: 180,000 yen / month
- Research Expenses: 250,000 yen / year



EXPERIENCES

Workshop Organizer for YRRSDS 2024

JUNE 2024 - SEPTEMBER 2024

• I worked as an organizing committee member for Young Researchers' Roundtable on Spoken Dialogue Systems (YRRSDS 2024), where I contributed to creating the program and facilitated discussions during workshop sessions.

Research Intern at CyberAgent AI Lab

AUGUST 2023 – SEPTEMBER 2023

 I worked on improving minimum bayes risk (MBR) decoding for neural machine translation models.

Dialogue Robot Competition 2022

MAY 2022 – SEPTEMBER 2022

• Leading a team of seven members, we implemented a spoken dialogue system to control a humanoid robot.

Teaching Assistant for Intelligent Interface 2, Nagoya University

JUNE 2022 - AUGUST 2022

• I prepared lecture materials and setup dialogue systems to be used in the class.

Dialogue Robot Competition 2021

JUNE 2021 - AUGUST 2021

Leading a team of four members, we implemented a spoken dialogue system to control a humanoid robot.

Short-term Study Abroad at Nanjing University, China

FEBRUARY 2018 – MARCH 2018

 As a supplementary prize for winning a Chinese Speech Contest, I participated in a onemonth language exchange program at Nanjing University in China.



- Linux
- Git
- Python

- TensorFlow
- Pytorch
- Hugging Face