# Atsumoto Ohashi

Ph.D. Candidate

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#### RESEARCH INTEREST

I am Atsumoto Ohashi, a Ph.D. candidate in Informatics at Nagoya University, with a primary research focus on dialogue systems. My work has centered on optimizing **task-oriented dialogue systems** through the integration of NLP and **reinforcement learning (RL) techniques** (EMNLP 2023, NAACL 2024, and AAAI 2025). Recently, my research interests have expanded to spoken language models and **full-duplex spoken dialogue systems** (INTERSPEECH 2025) for real-time and more natural conversational experiences.

#### RESEARCH EXPERIENCE

#### Kyutai, Paris, France

September 2025 – Present

Visiting PhD Student

Mentors: Eugene Kharitonov, Alexandre Defossez, Neil Zeghidour

Project: Improving turn-taking behaviors of full-duplex spoken language models with RL

#### National Institute of Informatics (NII), Remote

June 2025 – September 2025

Research Assistant

Project: Development of spoken dialogue models at LLM-jp project

#### CyberAgent AI Lab, Tokyo, Japan

August 2023 – September 20233

Research Intern

Mentors: Ukyo Honda, Tetsuro Morimura, Yuu Jinnai

Project: Analyzing minimum bayes risk (MBR) decoding for neural machine translation models

#### SELECTED PUBLICATIONS

#### **Conferences**

Towards a Japanese Full-duplex Spoken Dialogue System

Atsumoto Ohashi, Shinya Iizuka, Jingjing Jiang, Ryuichiro Higashinaka

In: Proc. INTRESPEECH 2025, pp. 1783–1787

Universal Post-Processing Networks for Joint Optimization of Modules in Task-Oriented Dialogue Systems

Atsumoto Ohashi, Ryuichiro Higashinaka

In: Proc. AAAI 2025, pp. 24975–24983

On the True Distribution Approximation of Minimum Bayes-Risk Decoding

Atsumoto Ohashi, Ukyo Honda, Tetsuro Morimura, Yuu Jinnai

In: Proc. NAACL 2024, pp. 459-468

JMultiWOZ: A Large-Scale Japanese Multi-Domain Task-Oriented Dialogue Dataset

Atsumoto Ohashi, Ryu Hirai, Shinya Iizuka, Ryuichiro Higashinaka

In: LREC-COLING 2024, pp. 9554–9567

Enhancing Task-oriented Dialogue Systems with Generative Post-processing Networks

Atsumoto Ohashi, Ryuichiro Higashinaka

In: EMNLP 2023, pp. 3815–3828

Adaptive Natural Language Generation for Task-oriented Dialogue via Reinforcement Learning Atsumoto Ohashi, Ryuichiro Higashinaka

In: COLING 2022, pp. 242–252

Post-processing Networks: A Method for Optimizing Pipeline Task-oriented Dialogue Systems using Reinforcement Learning

Atsumoto Ohashi, Ryuichiro Higashinaka

In: SIGDIAL 2022, pp. 1–13

# Journals

Optimizing pipeline task-oriented dialogue systems using post-processing networks <u>Atsumoto Ohashi</u>, Ryuichiro Higashinaka

In: Computer Speech & Language, vol. 90, No. 101742

Adapting language generation to dialogue environments and users for task-oriented dialogue systems

Atsumoto Ohashi, Ryuichiro Higashinaka

In: Natural Language Processing Journal, vol. 11, No. 100153

### **EDUCATION**

Nagoya University, Japan

April 2023 – Present

Ph.D. in Informatics

Advisor: Prof. Ryuichiro Higashinaka

Nagoya University, Japan

April 2021 – March 2023

M.S. in Informatics

Advisor: Prof. Ryuichiro Higashinaka

Nagoya University, Japan

April 2017 – March 2021

B.S. in Computer Science

Advisor: Prof. Ryuichiro Higashinaka

# HONORS & AWARDS

#### **Committee Special Award (32/726)**

March 2025

The 31st Annual Meeting of the Association of Natural Language Processing (NLP2025)

#### 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

## 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

# **INVITED TALKS**

# Towards Understanding Performance Variability in MBR Decoding

June 2024

The 59th NLP Colloquium

#### **EMNLP 2023 Conference Report**

December 2023

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 96th Meeting of Special Interest Group on Spoken Language Understanding and Dialogue Processing (SIG-SLUD96)