

Congda Ma

Email: ma@lr.pi.titech.ac.jp

Field: Natural Language Processing

State: Immediate available

Language: English, Japanese, Chinese

My research focuses on responsible AI and controllable text generation. I am dedicated to contributing to developing models that produce reliable and trustworthy outputs.

Experience

Research Internship, Sony Group Corporation

Aug 2023 - Sep 2023

Well under control in the generated dialog by applying a novel method combining prompt learning and RAG. This method can train a dialog generation character by using a small amount of training data. It outperformed in human evaluation.

Research Internship, rinna

May 2022 - Dec 2022

Getting the state-of-the-art performance in control ability in single attribute text generation task with LLMs by mitigating bias with a novel method based on PEFT.

Internship, Mitsubishi Heavy Industries

Jan 2020 - Feb 2020

Getting 10% increase in accuracy of the information extract system by applying a seq2seq model.

Publication

- **Debiasing Large Language Models with Structured Knowledge**

Findings of ACL 2024

Congda Ma, Tianyu Zhao, and Manabu Okumura

The aim is to reduce the biases that LLMs learn during pre-training and ensure the responsibility and fairness of generated texts based on LLMs. By using structured knowledge on the continued pre-training, we can control the biases of LLMs while keeping low computation costs.

- **Coherent Story Generation with Structured Knowledge**

RANLP 2023

Congda Ma, Kotaro Funakoshi, Kiyoaki Shirai, and Manabu Okumura

The aim is to increase the consistency of texts generated by LLM. By incorporating external knowledge into the text generation process, the consistency and diversity of the generated texts are improved while maintaining fluency.

- **Focused Prefix Tuning for Controllable Text Generation**

ACL 2023

Congda Ma, Tianyu Zhao, Makoto Shing, Kei Sawada, and Manabu Okumura

The aim is to make LLMs generate text with more accurate content. By using a method based on PEFT, we improve the ability to generate text with desirable content while keeping computational costs low.

Education

Institute of Science Tokyo (formerly Tokyo Institute of Technology)

Apr 2021 – Sep 2025, Japan

PhD candidate in Okumura-Funakoshi Lab

Japan Advanced Institute of Science and Technology

Apr 2019 - Mar 2021, Japan

M.S. of Information Science in Natural Language Processing

Certification

- JLPT N1
- Microsoft Certified: Azure Cosmos DB Developer Specialty
- Microsoft Certified: Security Operations Analyst Associate

Competition

- Language and Intelligence Challenge 2020 (Machine Reading Comprehension): Top 5%

Skill and Knowledge

LLM, Deep learning, Machine learning, Transfer Learning
Python, Pytorch, Linux