# Yating Wu

## PhD Student

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in wuyating

YatingWu96

## Research Overview

My research primarily concentrates on **text generation**, **evaluation**, **and their applications**. My experience includes:

- **?** Continuous pretraining, fine-tuning LLM on science field.
- Parameter Enhancing text comprehension through discourse relationships within documents. Specifically, I work on problems related to "Questions Under Discussion".
- **?** Enhancing the planning and tool using ability of LLM agents.

#### Education

2022 – Now **Ph.D. in Electrical and Computer Engineering**, The University of Texas at Austin

Advisors: Jessy Li, Alex Dimakis

2020 – 2024 M.S. in Electrical and Computer Engineering, The University of Texas at Austin

Advisors: Jessy Li, Alex Dimakis

- 2014 2019 **B.Eng. in Computer Science & B.A. in Japanese**, Dalian University of Technology
- 2017 2018 Exchange student in Computer Science, The University of Tokyo Advisor: Toshihiko Yamasaki

#### Publications

- [1] Ramya Namuduri, **Yating Wu**, Anshun Asher Zheng, Manya Wadhwa, Greg Durrett and Junyi Jessy Li "QUDsim: Quantifying Discourse Similarities in LLM-Generated Text." arXiv [Paper]
- [2] Yating Wu\*, Ritika Rajesh Mangla\*, Alexandros G. Dimakis, Greg Durrett, Junyi Jessy Li. "Which questions should I answer? Salience Prediction of Inquisitive Questions." Conference on Empirical Methods in Natural Language Processing (EMNLP Oral), 2024. Outstanding Paper Award. [Paper]
- [3] Negin Raoof\*, Yating Wu\*, Carlos Bonilla\*, Junyi Jessy Li, Stephanie M Grasso, Alex Dimakis, Zoi Gkalitsiou. "Modeling Bilingual Disfluencies with Large Language Models." Workshop on LLMs and Cognition in International Conference on Machine Learning (ICML Workshop), 2024. [Paper]
- [4] Yating Wu, Ritika Rajesh Mangla, Greg Durrett, Junyi Jessy Li. "QUDeval: The Evaluation of Questions Under Discussion Discourse Parsing." Conference on Empirical Methods in Natural Language Processing (EMNLP Oral), 2023. [Paper]

- [5] Yating Wu\*, William Sheffield\*, Kyle Mahowald, and Junyi Jessy Li. "Elaborative Simplification as Implicit Questions Under Discussion." Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023. [Paper]
- [6] Wei-Jen Ko, **Yating Wu**, Cutter Dalton, Dananjay Srinivas, Greg Durrett and Junyi Jessy Li. "Discourse Analysis via Questions and Answers: Parsing Dependency Structures of Questions Under Discussion." Findings of the Association for Computational Linguistics (**ACL**), 2023. [Paper]
- [7] Venelin Kovatchev, Trina Chatterjee, Venkata S Govindarajan, Jifan Chen, Eunsol Choi, Gabriella Chronis, Anubrata Das, Katrin Erk, Matthew Lease, Junyi Jessy Li, **Yating Wu**, Kyle Mahowald. "longhorns at DADC 2022: How many linguists does it take to fool a Question Answering model? A systematic approach to adversarial attacks." DADC Workshop in The Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL Workshop), 2022 [Paper]

## Professional Experience

- May Aug. 2024 Applied Scientist Intern, Amazon Alexa AGI, Sunnyvale, CA
  - Worked on research problem for enhancing the planning and tool-using capabilities of LLM agents.
- Jun. Aug. 2023 Software Engineer Intern, Amazon Prime Video, Austin, TX
  - $\bullet\,$  Implemented an in-game notification system using Rule Engine.
- Jun. Sept. 2021 Software Engineer Intern, Amazon Prime Video, Austin, TX
  - $\bullet\,$  Implemented a Java-based Ranking System for live events.

## Teaching Experience

- CS391L Machine Learning (graduate level), Head Teaching Assistant, Summer 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025
- CS391L Machine Learning (graduate level), Teaching Assistant, Fall 2021, Spring 2022
- EE422C Software design & implementation II (Java), Teaching Assistant, Summer 2020, Fall 2020, Spring 2021

## Mentoring Experience

Master's student Ritika Mangla, 2022-2024, co-authored paper [1] and [3]

### Honors

- Nov. 2024 Outstanding paper award in EMNLP 2024
- Jul. 2021 1st place in VMware Codehouse Palo Alto
- Jun. 2019 Outstanding graduates of Dalian University of Technology
- Jun. 2014 Outstanding graduates of Anshan No.3 Senior High School

### Invited Talks

- Mar. 2025 Outstanding Student Lecture Series, UT Austin
- Apr. 2024 MLL Research Symposium, UT Austin

## Skills

 $\begin{array}{ll} \mbox{Programming} & \mbox{Python, Java, C/C++, JavaScript(TypeScript), Bash, SQL, HTML/CSS, Kotlin,} \\ & \mbox{LAT}_{\hbox{\it EX}} \\ \end{array}$ 

Tools Tensorflow, PyTorch, Stanford CoreNLP, NLTK, Amazon Web Service, Cuda Programming, Mockito, Guice, DynamoDB