

Yijing Zhang

RESEARCH INTERESTS	<i>NLP, Foundation Models, Data Efficiency, Robustness</i>	
CONTACT INFORMATION	<i>E-mail:</i> zhangyijing2002@gmail.com <i>Website:</i> https://yijingz02.github.io/	
EDUCATION	B.S. in Computer Science University of Wisconsin - Madison • Honor in the Major, Computer Science	Sep 2021 - May 2024
PUBLICATIONS	Yijing Zhang , Frederic Sala. <i>Methods for Domain-specific Fine-tuning for Generative Models</i> . Senior honor thesis. [Paper] Lin Zhang, Shentong Mo, Yijing Zhang , Pedro Morgado. <i>Audio-Guided Visual Animation</i> . Accepted by European Conference on Computer Vision(ECCV) 2024. [Paper] Dyah Adila, Changho Shin, Yijing Zhang , Frederic Sala. <i>Is Free Self-Alignment Possible?</i> In submission to Neural Information Processing Systems(NeurIPS) 2024. [Paper] Dyah Adila, Changho Shin, Yijing Zhang , Frederic Sala. <i>Can Language Models Safeguard Themselves, Instantly and For Free?</i> Accepted by International Conference on Machine Learning(ICML) 2024 Workshop on NextGenAISafety.	
AWARDS	ACM ICPC 2021 NA Regional Contest: Team Rank 14. • Competitive programming since middle school. Regional first prize for OI competitions.	2021
RESEARCH PROJECTS	AlignEZ <i>@University of Wisconsin - Madison</i> • Related Topic: NLP, Alignment. • Supervisor: Fred Sala. • Focused on aligning pretrained language models without additional training.	May 2024 - Present
	Audio-guided Animation <i>@University of Wisconsin - Madison</i> • Related Topic: Computer vision, Generative models, Audio-to-Video. • Supervisor: Prof. Pedro Morgado. • Focused on generating audio-video highly synchronized animation with guidance on audio.	Mar 2023 - Present
	Methods for Domain-specific Fine-tuning for Generative Model <i>@University of Wisconsin - Madison</i> • Related Topics: NLP, Foundation models, Generative models, Fine-tuning, Data Efficiency • Supervisor: Prof. Fred Sala. • Served as independent research study for senior honor thesis. • Focused on investigating the retrainability of synthetic datasets generated by fine-tuned generative models for domain-specific downstream classification tasks and the fine-tuning efficiency for generating higher-quality synthetic datasets.	Feb 2022 - May 2024
EXPERIENCE	University of Wisconsin-Madison, USA <i>Peer Mentor</i> • Peer Mentor for the course CS400. • Responsibilities include: Holding drop-in office hours, and answering online questions.	Jan 2022 - May 2024

- Wrote a course reference document aimed at enhancing students' comprehension of course materials. The content includes topics such as Java interface design, generics, iterators, etc.

TECHNICAL SKILLS

- **Machine Learning:** Generative models, NLP, Foundation model, GPTs and Computer vision.
- **Math:** Probability, Statistics, Linear Algebra.
- **Research Tools:** Pytorch, TensorFlow, MATLAB, etc.
- **Research Skills:** Experiment design, Data collection, Data analysis, Essay writing etc.
- **Programming languages:** Python, Java, C, C++.
- **Developer skills:** Web Development, Front-end, and Back-end Development