

# Mike (Michael) Gee

✉ Email    🌐 Website    in LinkedIn    📄 GitHub    🐦 Twitter

## Education

### University of Southern California

B.S. in Computer Science, GPA : 3.50 / 4.0

Los Angeles, CA

Jan 2021 – Dec 2025

◦ **Dean's List:** Spring 2021, Fall 2023, Fall 2024

◦ **Relevant Coursework:** Machine Learning\*, Deep Learning\*, Natural Language Processing

\* Graduate-level course

## Under Review

### Conference:

- [1] **Conversational Time Series Foundation Models: Towards Explainable and Effective Forecasting**  
Defu Cao, *Michael Gee*, Jinbo Liu, Hengxaun Wang, Wei Yang, Rui Wang, Yan Liu  
ICLR 2026.

## Research Experience

### Undergraduate Researcher

USC Melady Lab

Oct 2024 – Present

*Advisor: Yan Liu*

- Designed LLM agent framework to improve generalizability and explainability in zero-shot time series forecasting that creates ensemble of Time Series Foundation Models (TSFMs)
- Engineered distributed pre-training and inference pipelines for TSFMs scaling up to 1 TB of data with GluonTS, PyTorch, and Hugging Face
- Achieved 1st place overall on GIFT-Eval Time Series Forecasting Leaderboard, resulting in 2nd author ICLR 2026 submission

### Undergraduate Researcher

USC DILL Lab

Feb 2025 – Present

*Advisors: Swabha Swayamdipta, Yixin Wang (UMich)*

- Leading project to improve interpretability in LLM evaluations by identifying fine-grained capabilities that benchmarks test
- Initiated project ideation and designed experiments assessing how well sparse autoencoders identify fine-grained capabilities in LLM benchmarks
- Presented weekly findings with graduate student collaborators and advisors to decide future research directions

## Projects

### Self-Supervised Contrastive Learning For Semantic Textual Similarity

Aug 2024 – Dec 2024

- Elucidated success of fine-tuning models for semantic textual similarity via self-supervised contrastive learning in low-resource settings using PyTorch and Sentence-BERT
- Achieved 36% performance improvement after fine-tuning and utilized hypothesis testing to prove statistical significance of performance gains

### Effects of Model Size on Machine Translation

Aug 2024 – Dec 2024

- Evaluated how model size affects performance on German-to-English machine translation to provide cost-benefit analysis between using small- and large-scale translation models
- Developed PyTorch and Transformers pipeline for fine-tuning models with LoRA and found that performance gains plateaued with increasing model size

## Leadership

### Treasurer

Society of Asian Scientists and Engineers at USC

May 2022 – May 2024

- Organized professional and social events for 300+ STEM students of Asian heritage with 10-person team
- Managed \$5,000+ annual budget and coordinated trips to conferences in San Diego, CA and Atlanta, GA

## Skills

---

**Programming Languages:** Python, C/C++, Java, MATLAB, HTML, CSS, JavaScript, PHP, SQL

**ML/DL Libraries:** PyTorch, GluonTS, Hugging Face, Sentence-BERT, scikit-learn

**Technologies:** Git, SLURM, W&B, L<sup>A</sup>T<sub>E</sub>X, Linux