Timothy Do

(408) 250-1737 | tim.do.info@gmail.com | linkedin.com/in/timothykhangdo | github.com/t1modo

Education

San Jose State University Dec. 2027
Bachelor of Science in Software Engineering **GPA:** 3.86/4.00

Publications

ERGO: Entropy-guided Resetting for Generation Optimization in Multi-turn Language Models
H. M. Khalid, A. Jeyaganthan, T. Do, Y. Fu, S. O'Brien, V. Sharma, K. Zhu
In Proceedings of the Second Workshop on Uncertainty-Aware NLP @ EMNLP 2025 | Published Paper
Accepted to First Workshop on Multi-Turn Interactions in Large Language Models @ NeurIPS 2025 | Poster
Accepted to Reliable ML from Unreliable Data @ NeurIPS 2025 | Poster

Timing of Ultrafast Electron and Laser Pulses with Narrowband THz Interferometry for Ultrafast Electron Diffraction
S. Weathersby, T. K. Do, V. Dolgashev, C. Duncan, J. England, P. Kramer, M. Othman, D. Palmer
In Proceedings of 2025 North American Particle Accelerator Conference (NAPAC) | Published Paper

Pruning for Performance: Efficient Idiom and Metaphor Classification in Low-Resource Konkani Using mBERT
T. Do, P. Saran, H. Poojary, P. Prabhu, S. O'Brien, V. Sharma, K. Zhu
Accepted to Student Research Workshop @ IJCNLP-AACL 2025 | Poster
Accepted to 1st Workshop on Multilingual Data Quality Signals @ COLM 2025 | Poster

Experience

Radio Frequency Accelerator Research Intern | **Research Poster** June 2025 — Aug. 2025
SLAC National Accelerator Laboratory *Menlo Park, CA*
- Analyzed accelerator data and improved MeV-UED camera time resolution by **33%** using S3DF resources
- Processed and visualized electron beam timing data with Python in Jupyter Notebook environments
- Evaluated ePix and Andor camera results to measure electron arrival and timing jitter precisely

Artificial Intelligence Research Intern | **Published Paper** May 2025 — July 2025
Algoverse *Remote*
- Developed ERGO method achieving **56.6%** average performance improvement over multi-turn baselines
- Recovered **15%** performance drop in multi-turn conversations using entropy-guided prompt restructuring
- Reduced response variability by **35.3%**, addressing **112%** increase in conversational AI inconsistency

Artificial Intelligence Research Intern | **Published Paper** Jan. 2025 — May 2025
Algoverse *Remote*
- Utilized a hybrid mBERT+BiLSTM model for figurative language detection, trained on low-resource Konkani
- Achieved an accuracy of **83%** for idiom classification and **78%** for metaphor classification
- Maintained **100%** idiom and **88%** metaphor classification accuracy while pruning attention heads

Engineering Success Research Intern | **Research Poster** Sep. 2023 — April 2024
San Jose State University – Charles W. Davidson College of Engineering *San Jose, CA*
- Researched AR simulations for visualizing wave mechanics and 3D physics concepts
- Proposed AR labs reducing physics education costs by **30%** over 3–5 years

Research Activities

Technical AI Safety Program Participant, BlueDot Impact (Selective Cohort, Jan. 2026)
Peer Reviewer, NeurIPS 2025 Workshop on Multi-Turn Interactions in Large Language Models (MTI-LLM)
Peer Reviewer, COLM 2025 Workshop on Multimodal Data Quality and Standards (WMDQS)

Technical Skills

Languages: Python, Java, JavaScript, LaTeX, C, HTML/CSS, C++
Frameworks & Libraries: Next.js, React, React Native, Expo, Flask, JavaFX, TailWind CSS, Pytorch, Matplotlib
Databases: Firebase, MongoDB, SQLite
Developer Tools: Jupyter Notebook, Git, Visual Studio Code, Eclipse, Scene Builder, SolidWorks, Vercel