Khoi Nguyen

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EDUCATION

The University of Texas at Dallas, Richardson, TX   Aug 2023 - Dec 2027
Doctor of Philosophy, Computer Science. GPA: 4.0
Fulbright University Vietnam, Ho Chi Minh, Vietnam   Sep 2019 - May 2023
Bachelor of Science, Computer Science. GPA: 3.91. *Summa Cum Laude*.

SELECTED PUBLICATIONS

- **Khoi P. N. Nguyen,** Terrence Li, Derek Lou Zhou, Gabriel Xiong, Pranav Balu, Nandhan Alahari, Aaron Xu, Alan Huang, Tanush Chauhan, Harshavardhan Bala, Emre Guzelordu, Affan Kashfi, Suyesh Shrestha, Megan Vu, Jerry Wang, Vincent Ng, "*MemeQA: Holistic Evaluation for Meme Understanding*", **ACL25**
- **Khoi P. N. Nguyen**, Vincent Ng, *"Computational Meme Understanding: A Survey"*, **EMNLP24**
- Jeongsik Park*, **Khoi P. N. Nguyen***, Terrence Li, Suyesh Shrestha, Megan Kim Vu, Jerry Yining Wang, and Vincent Ng. 2024. "*MemeIntent: Benchmarking Intent Description Generation for Memes*", **SIGDIAL24**

WORK EXPERIENCES

GE Aerospace Research, Niskayuna, NY, USA   Jun 2025 - Aug 2025
Fellow Intern

- Developed a pipeline for engine requirement standardization using **LLMs** that caught 85% of violations
- Prototyped a **knowledge graph**-powered virtual assistant

Solano Energy, Ho Chi Minh, Vietnam   Jun 2024 - Oct 2024
Artificial Intelligence Research Intern

- Built a **computer vision** application that estimates solar energy potential of a building just from user-input address, using **Dash (Python)** and **Azure VM**, boosting pre-sales for our solar panel installment service
- **Fine-tuned Segment Anything model** for roof segmentation on Vietnamese **satellite imagery data**
- Built an **annotation tool** for roof segmentation using **LabelStudio**, where the input data is collected online from the end-user application

Koidra, Ho Chi Minh, Vietnam   Aug 2022 - May 2023
Machine Learning Research Intern

- Developed a **symbolic regressor** to learn agricultural control logic directly from greenhouse data with 72% accuracy, **reducing the onboarding time** for new customers by approximately 6%
- Implemented a **Python** codebase that ensembles **Decision Trees**, **Linear Regression**, and **Neural Networks**

Google x National University of Singapore, Singapore   Jun 2022 - Jul 2022
Student Researcher

- Built **classification models** on categories of text messages by training **Support Vector Machine** and finetuning **BERT** in **Scikit-learn**, achieving **90% accuracy**
- Constructed a dataset of 3000 financially related text messages to benchmark message classifiers

TECHNICAL SKILLS

Programming Languages: (Proficient) Python; (Familiar) C/C++, JavaScript, Java
Libraries and Tools: PyTorch, Tensorflow, Scikit-learn, AWS, Azure, Docker

AWARDS

Second Prize, ICPC Da Nang Regional Contest, Asia-Pacific Regional Round. (2019)
Second Prize, Vietnam Olympiad in Informatics, Rank 30 nation-wide, qualified for Asia-Pacific Team Selection Test. (2019)