# TRI NGUYEN

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## OBJECTIVE

Seeking a full-time position in the ML/AI domain, with a focus on the practical application of machine learning guided by optimization, estimation, and model identifiability principles.

## EDUCATION

**Ph.D. in Computer Science**, Oregon State University — Corvallis, OR, US 2020 - 2025
GPA: 3.85/4

**B.Sc. in Computer Science**, Ho Chi Minh City University of Technology — Vietnam 2012 - 2017
Graduated in Top 10 in CS&EE Department

## RELATED EXPERIENCE

**AI Research Engineer/Scientist Grad Intern** June 2025 - Aug 2025
Multimodal Cognitive AI, Intel Corporation, *Santa Clara, California*

- Developing a benchmark framework to assess LLMs' deception capabilities.
- Improving vision-language model interpretability using non-linear sparse autoencoder.

**Graduate Research Assistant** Mar 2020 - Present
*Prof. Xiao Fu*, Oregon State University, *Corvallis, OR*

- Developing a robust preference learning method for fine-tuning LLM with noisy preference feedback.
- Tackled the noisy label learning problem in a challenging setting where noisy labels depends on samples.
- Significantly enhanced deep clustering robustness on heavily noisy pairwise annotations by 15% accuracy through a novel volume-based regularizer with identifiability guarantee.
- Drastically reduced memory usage from $O(N^2)$ to $O(N)$ to solve a foundational matrix factorization problem in signal processing and machine learning applications.

**AI Engineer** Feb 2017 - Jan 2020
YouNet Group *Ho Chi Minh City, Vietnam*

*Sentiment Analysis*

- Lowered workload of social media research team by 25% via deploying an LSTM-based classification model using a continuous integration pipeline, handling expanding dataset.
- Deployed on-demand scalable sentiment classification APIs on Google Cloud to serve production team.
- Minimized downtime of text crawling system processing GBs of data daily by implementing systematic logging, monitoring, exception handling, and through comprehensive unittests.

*Customized Data Retrieval and Aggregation*

- Boosted business team's performance by designing and implementing a retrieval app with domain-specific language (DSL) featuring advanced operators such as `not`, `and`, `or`, `*`.

## PUBLICATIONS

- (NeurIPS2025 submission, under review) **T. Nguyen**, and X. Fu. *Preference Optimization with Noisy Feedback: Provable Learning via Crowd Annotation.*
- **[NeurIPS2024(spotlight)] T. Nguyen**, S. Ibrahim, and X. Fu. *Noisy Label Learning with Instance-Dependent Outliers: Identifiability via Crowd Wisdom.*
- **[ICML2023] T. Nguyen**, S. Ibrahim, and X. Fu. *Deep Clustering with Incomplete Noisy Pairwise Annotations: A Geometric Regularization Approach.*
- **[ICLR2023]** S. Ibrahim, **T. Nguyen**, and X. Fu. *Deep Learning From Crowdsourced Labels: Coupled Cross-Entropy Minimization, Identifiability, and Regularization.*
- **[TSP2022] T. Nguyen**, X. Fu, and R. Wu. *Memory-Efficient Convex Optimization for Self-Dictionary Separable Nonnegative Matrix Factorization: A Frank-Wolfe Approach.*

## SKILLS

- HuggingFace, Lightning, PyTorch, wandb, Ray, TensorFlow, Pandas, NumPy, scikit-learn
- Docker, Git, Tmux, Vim, Python, Matlab, C++, Latex; OOP, design pattern, functional programming