

# TRI NGUYEN

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## OBJECTIVE

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A Ph.D. student with the interests in the intersection practical machine learning with theory-driven optimization and estimation looking for internship opportunities in ML/AI domain.

## EDUCATION

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**Ph.D. in Computer Science**, Oregon State University — Corvallis, OR, US      2020 - Expected 2025  
GPA: 3.85/4  
Bachelor of Computer Science, Ho Chi Minh City University of Technology — Vietnam      2012 - 2017  
Graduated in Top 10 in CS&EE Department

## RELATED EXPERIENCE

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

- Developing a robust preference learning method to finetune LLM with noisy data.
- 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**, **\***.

## RESEARCH PUBLICATIONS

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- [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

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

## EXTRACURRICULAR ACTIVITIES

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- Tutoring at TRIO SSS program as a math tutor at OSU in Fall 2023.
- Joined the OSU badminton club.
- Coding for fun in free time: <https://github.com/ductri/BibMan>