LINH TRAN

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EDUCATION

University of Rochester | Rochester, NY

Masters of Science in Computer Science, AI Specialization   Expected: Dec 2025

Bachelor of Science in Computer Science, Minor in Mathematics, GPA: 3.5   Dec 2024

- **Coursework:** End-to-End Deep Learning, Computer Vision, Natural Language Processing, Data Mining, Machine Learning, Design & Analysis Efficient Algorithms, Data Structure & Algorithms
- **Activities:** Women in Computing, oSTEM, Google Developer Students Club, Out for Undergrad

SKILLS & CERTIFICATIONS

- **Programming Languages**: Python, Java, SQL, C/C++, Bash, HTML, CSS
- **Tools:** PyTorch, Pytorch Lightning, Transformers, Jupyter Notebook, Wandb, Linux/Unix, Git, VS Code
- **Certifications**: CodePath Advanced Technical Interview Prep (Jan 2025)

MACHINE LEARNING EXPERIENCE

Data Science Team Lead - Dye Lab, UR Medical Center | Rochester, NY   Sep 2024 - Present

- Lead and facilitate weekly collaborative meetings with team of 15 epidemiology experts and data scientists
- Develop SocioScope, a social oppression analysis system leveraging Microsoft Phi-3, Qwen and Gemma 3 LLM
- Implement 20 prompt strategies including few-shot learning, chain of thought and Likert scale to improve classification accuracy from 72% to 88% on 10,000+ unstructured survey data

Deep Learning Research Assistant - kLab, University of Rochester | Rochester, NY   Jan 2024 - Present

- Engineered bias detection framework evaluating 20+ vision models (ResNet, VGG-13, DinoV2), reducing demographic bias by 9% while maintaining 80% task accuracy
- Expose disparities in races and occupations with image processing and prompting Vision-Language Models
- Implement GPU-optimized CI/CD pipeline with Wandb to automate DNNs testing and deployment
- Co-author 2 research papers on Vision-Language Models and present complex findings to diverse audiences

Machine Learning Intern - VinBigData | Remote   May 2023 - Aug 2023

- Optimized seq2seq model with attention mechanism, increasing chatbot accuracy by 10% (BLEU score from 0.72 to 0.79) through systematic hyperparameter tuning and data composition augmentation
- Built multilingual chatbot deployment pipeline with 180% improved speed using Pytorch, TorchServe and Bash
- Contributed insights in cross-functional meetings with PMs to shape the chatbot's conversational flow

PROJECT & HACKATHON

DoubletDetection - Biomedical Hackathon, 1st Place | *Python, R, Jupyter Notebook*   GitHub

- Led team of 3 to First Place through rapid research and development cycle within 1-week
- Implemented BoostClassifier to detect doublet cells in single-cell RNA sequencing data using Python
- Increased accuracy by 15% by applying feature engineering, feature selection, and PCA with Python and R

DeBERTa Performance Analysis with Negative Samples | *Python, PyTorch, Transformers, Bash*   GitHub

- Generated 50,000+ Q&A pairs for training data by sampling SQuAD dataset using Regex and NER analysis
- Systematically evaluated 6 data augmentation methods and 4 negative-to-positive sample ratios to optimize DeBERTa's question-answering performance
- Improved accuracy from 77% to 89% on SQuAD through hyperparameter optimization and weighted sampling

LEADERSHIP & VOLUNTEER

ACM New York Celebration of Women in Computing 2025 | Conference Presenter   Apr 2025

Computer Science Department | Teaching Assistant, Tutor   Jan 2023 - Present

University Student Leadership | Orientation Week Leader, VSA Event Manager   Jan 2022 - Sep 2024