Hua (Hans) Yang

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Education

NC State University, Raleigh, NC   **GPA: 3.7/4.0**
Ph.D., Computer Science, Aug 2024 – Jun 2028
Relevant Coursework: Software Engineering, Algorithms, Generative AI for Software Engineering

South China University of Technology   **GPA: 4.0/4.0**
M.S., Computer Science, Sep 2021 – Jun 2024
Relevant Coursework: Machine Learning Algorithms, Software Testing

Central South University   **GPA: 4.0/4.0**
B.S., Electronic Engineering, Sep 2017 – Jun 2021
Relevant Coursework: Object-Oriented Programming, Networks, Data Structures and Algorithms

Skills

Languages: Python, Java, C#, CSS, HTML, JavaScript
Tools/Frameworks: Git, PyTorch, HuggingFace, CI/CD, AWS, REST APIs, Flask, Bootstrap
Databases and Operating Systems: MySQL, Oracle, SQLite, Windows, Ubuntu
Computer Networks: TCP/IP, SSH, Socket Programming, DNS, HTTP,

Work Experience

Machine Learning Intern
AI Large Model for Intelligent Cognition Center, Pazhou Lab (Guangzhou)   *May 2022 – May 2023*
- Engineered a real-time multimodal sleep disorder detection system, achieving top-5 ranking among 171 national teams and securing a $10,000 award.
- Improved multi-domain model accuracy ($55\% \rightarrow 59\%$) across 7 datasets (text, networks, multimodal) while achieving a $110\times$ runtime speedup, setting a new state-of-the-art benchmark.
- Evaluated hardware performance for a $2M LLM-powered voice customer service platform, ensuring scalability and reliability for enterprise deployment.

Project

Fine Tuning Code LLM with raw data for security   *Sep 2024 – MAY 2025*
- Fine-tuned CodeGPT (GPT-2), StarCoder, and CodeGen using PyTorch and Hugging Face, producing optimized models for advanced code generation tasks.
- Developed an automated causal inference framework using Causal Graphs and Do-Calculus, enabling actionable and interpretable analysis at scale.
- **Tech: Python, Java, PyTorch, Hugging Face, Github, CUDA,**

Movie Recommendation Web App Integrating LLMs   *Sep 2024 – Dec 2024*
- Led a 4-person team to develop a web app for movie recommendations, mentoring junior developers and ensuring **smooth collaboration**.
- Designed and optimized machine learning models (SVM, CNN, XGBoost) for AI-driven movie recommendations, including issue tracking, pull requests, and CI/CD automation.
- **Tech: CSS, HTML, CI/CD, SVM, CNN, XGBoost, MySQL**

Publications

- **Yang, H.**, et al. (2025) *How Do Semantically Equivalent Code Transformations Impact Membership Inference on LLMs for Code? Submitted to ICSE 2026* (under review).
- **Yang, H.**, Chen, C. P., Chen, B., & Zhang, T. (2024). *Improving the Interpretability through Maximizing Mutual Information for EEG Emotion Recognition. IEEE Transactions on Affective Computing.* (Top Journal in AI for Science).
- **Yang, H.**, Chen, C. P., Chen, B., & Zhang, T. (2023). *Facexplainer: Generating model-faithful explanations for graph neural networks guided by spatial information.* In *2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)* (pp. 718-725). IEEE. (Acceptance Rate: 19.5%, Explainable AI).