

Wilson (Chen-Wei) Chang

(571) 594-7580 | wilsonchang@vt.edu | <https://www.linkedin.com/in/wilsonnchang>

EDUCATION

Virginia Tech

Alexandria, VA

M.S. in Computer Science

08/2024 - 05/2026

- Coursework: Software Engineering, Web Application Development, Database Management Systems

National Dong Hwa University

Hualien, Taiwan

B.S. in Computer Science and Information Engineering

09/2019 - 06/2023

- Academic Excellence Award, 2021 Fall and 2022 Spring, Upper-Division GPA: 4.45 / 4.50
- Coursework: Data Structures, Algorithms, Object-oriented Programming, Operating Systems, Computer Architecture

WORK EXPERIENCE

TSMC, AI Research and Development Intern

06/2025 - 08/2025

- Improved anomaly resolution speed by **80%**, achieving projected annual savings of \$620K
- Deployed Qwen3 LLMs on NVIDIA H100 GPUs using SGLang, delivering scalable inference APIs
- Built **Agentic AI** system with Stanford's OctoTools for FDC parsing, anomaly detection, and RAG-based SOP retrieval
- Analyzed process logs and established logic-driven visual reports, reducing manual data interpretation time by **70%**

Virginia Tech, Research Assistant

08/2024 - 05/2025

- Developed a multi-model voting system by integrating traditional ML and LLM, improving LLaMA's accuracy by **30%**
- Enhanced scam detection by **fine-tuning** LLaMA3 8B on adversarial datasets with **LoRA** to improve response accuracy
- Implemented adversarial evaluation by integrating various LLM APIs with **zero-shot** and **few-shot** learning

Shin Kong Financial Holding, Software Intern

01/2023 - 02/2023

- Developed Python programs to automate data analysis and organization, reducing manual processing time by **90%**
- Built a Python GUI with Tkinter to convert COBOL and DOT files to CSV, reducing processing time by **50%**
- Integrated Vue.js front-end (Element UI) with back-end integration for credit card management.

SELECTIVE PROJECTS

Full-Stack E-commerce Shopping Platform | Github

08/2024 - 12/2024

- Implemented **TypeScript** on a Tomcat server, utilizing DAO patterns and JDBC for interactions with **MySQL** database
- Built a real-time shopping cart feature through **RESTful API** integration between frontend and backend
- Designed a responsive and interactive Single Page Application (SPA) frontend using **React.js** and HTML/CSS

Website with Automatic Post Review Based on NLP (Group) | Github

09/2021 - 05/2022

- Deployed a responsive web application on **Heroku** using **JavaScript** and **Flask** to manage MySQL database
- Engineered a Python web crawler program to extract 2.2 million datasets, increasing data retrieval speed by **50%**
- Preprocessed training data with Python NLTK for tokenization, stop-word removal, and text normalization

SKILLS

Programming Languages: Python, SQL, C++, C, Swift, Solidity

Web Development: HTML/CSS, JavaScript, TypeScript, React.js, Vue.js, Bootstrap, RESTful API, Tomcat

Machine Learning & AI: PyTorch, Scikit-Learn, Hugging Face, RAG (TF-IDF), NLTK, NumPy, Pandas, Matplotlib

Cloud & Tools: AWS, Docker, Git/GitHub, Flask, Selenium, Tkinter, VMware (Linux), Heroku, OctoTools (Agentic AI)

Publications

"Exposing LLM Vulnerabilities: Adversarial Scam Detection and Performance" *IEEE Big Data 2024 (1st Author)*

"Scam Shield: Multi-Model Voting and Fine-Tuned LLMs Against Adversarial Attacks" *Target: IEEE ICDM 2025 (1st Author)*

"RailEstate: An Interactive System for Metro Linked Property Trends" *ACM SIGSPATIAL 2025 (1st Author)*