Wilson (Chen-Wei) Chang

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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, GPA: 3.91/4.5
- Coursework: Data Structures, Algorithms, Object-oriented Programming, Operating Systems, Computer Architecture

WORK EXPERIENCE

Virginia Tech Alexandria, VA

Research Assistant

08/2026 - present

- 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 scam data 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 Co., Ltd., Head office

Software Intern, Digital Information Department

Taipei, Taiwan

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 format, reducing processing time by 50%
- Constructed a Vue.js front-end with Element UI for managing credit card info, enhancing user efficiency by 30%
- Assisted with back-end development using **Spring Boot** and integrated with the front-end

SELECTIVE PROJECTS

Full-Stack E-commerce Shopping Platform

08/2024 - present

- 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.is** and HTML/CSS

AI-Powered Recipe Generator Application (Group)

08/2024 - present

- Established a Python web application using Streamlit with agile development and pytest for unit testing
- Integrated OpenAI and Google Cloud Vision API to create a dynamic recipe generation feature

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, C++, C, Swift, Solidity

Web Development: HTML/CSS, JavaScript, TypeScript, React.js, Node.js, Vue.js, Bootstrap, RESTful API, SQL Toolkits and Libraries: Flask, pytest, Selenium, Tkinter, Matplotlib, openpyxl, Pandas, NumPy, Scikit-Learn, NLTK, torch Technology: Heroku, Hugging Face, Git/GitHub, VMware (Linux), Xcode, VSCode, Code::blocks, Anaconda, IntelliJ IDEA

Publications

Chen-Wei Chang, "Exposing LLM Vulnerabilities: Adversarial Scam Detection and Performance," 2024 IEEE International Conference on Big Data, Washington, DC, USA. (First Author)

Chen-Wei Chang, "Scam Shield: Multi-Model Voting and Fine-Tuned LLMs Against Adversarial Attacks", 2025 ECML PKDD (First Author, under review)