

Tangyuan (Daniel) Zhang

✉ zhangty3@shanghaitech.edu.cn | 🌐 <https://zty0510.github.io> | ☎ +86 (177) 1708-3436

EDUCATION

SHANGHAI TECH UNIVERSITY, Shanghai, China

Sept. 2020 - Expected Jun. 2024

Bachelor of Science Candidate, Computer Science and Technology

EXPERIENCE

SHANGHAI TECH UNIVERSITY, Shanghai, China

Undergraduate Researcher, ASPIRE (AI Security, Privacy, and Robustness) Lab

Aug. 2023 - Present

PI: Wenjie Wang

- Researching on improving security and privacy of large language models, such as BERT and GPT.
- Constructing prompts through reinforcement learning to find vulnerabilities by simulating attacks on neural networks.
- Researching on Jailbreaking and Adversarial attacks on multi-modals (CLIP&Stable-diffusion).

Undergraduate Researcher, CAT (Code Analysis and Testing) Lab | PI: Yutian Tang Mar. 2021 – Sept. 2021

- Detected and exploited vulnerabilities in Android system's accessibility service by studying API documentation to find logic weaknesses.
- Focused on the drawback of the design in accessibility service and applied various techniques using Java and Kotlin to bypass the security mechanism to retrieve sensitive information, such as password input by remotely monitoring screen.

SHANGHAI LUOSHU INVESTMENTS CO., LTD., Shanghai, China

Aug. 2022 – Dec. 2022

Python Developer Intern, IT2

- Developed and maintained the company's quantitative and high-speed trading systems and company's automation platform for daily uploading and running of scripts.
- Developed data platform and factor platform to aid trading decisions.
- Optimized the storage of transaction data and accelerated the trading backtesting through parallel computing.

SHANGHAI SHUDAN INFORMATION AND TECHNOLOGY (AFA FINANCE), Shanghai, China

July. 2022 – Aug. 2022

Python Developer

- Developed a web crawler for NFT market information, employing reverse engineering and decompilation with HTML, Javascript, and Python.
- Established and maintained a database for data collection and automated script management.

PROJECTS

Chrome Dino Runner Game(RISC-V Architecture)

- Implemented Chrome Dinosaur Game on the Longan Nano development board in RISC-V architecture.
- Designed interactive user interface with physical buttons and animations in RISC-V assembly language.

Stock Movement Prediction Based on Social Media Text And Sentimental Analysis

- Developed an automated crawler for data collection from Twitter and stock news.
- Designed an efficient way to pre-process collected data and apply feature engineering.
- Implemented various machine learning models(LSTM, XG Boost, RF Regression) for stock price prediction based on historical market data and current public sentiment.
- Design an efficient evaluation and baseline to evaluate trading model and strategy.

ACTIVITIES

Volunteer, Social Practice Project, Wase Township, Dali City, Yunnan Province

Aug. 2021

- Created curriculum with team for *Intro to IT* and taught the course to rural middle school students
- Engaged in learning traditional dyeing techniques for textiles.

SKILLS AND AWARDS

- Languages: Chinese (Native), English (Fluent).
- Computer Skills: Python, Java, HTML/CSS, JavaScript