Yuxuan Zhou

(+1) 315-415-4615 | hizyx97@gmail.com | Personal Website | LinkedIn | GitHub 4-294, 111 College Pl., Syracuse, NY 13210

EDUCATION

Syracuse University

Syracuse, NY

Ph.D. in Computer and Information Science and Engineering (GPA: 3.93/4.0) M.S. in Computer Science

Aug. 2021 - May 2026 (Expected)

Aug. 2019 - Dec. 2020

Hubei University

Wuhan, China

Bachelor of Software Engineering

Sept. 2015 - Jun. 2019

University of Minnesota

Minneapolis, MN

Exchange Program

Summer 2018

Publications

Towards Understanding Crypto-Asset Risks on Ethereum Caused by Key Leakage on the Internet. Yuxuan Zhou, Jiaqi Chen, Yibo Wang, Yuzhe Tang and Guofei Gu. ACM Web Conference (WWW), 2024.

Uncovering Atomicity Violations and Security Risks in Decentralized Exchange in the Wild. Jiaqi Chen, Yibo Wang, Yuxuan Zhou, Wanning Ding, Yuzhe Tang, XiaoFeng Wang, and Kai Li. 8th IEEE European Symposium on Security and Privacy, 2023.

Graph4Web: A Relation-Aware Graph Attention Network for Web Service Classification. Kunsong Zhao, Jin Liu, Zhou Xu, Xiao Liu, Lei Xue, Yuxuan Zhou, and Xin Wang. Journal of Systems and Software (JSS), 2022.

Predicting Crash Fault Residence via Simplified Deep Forest Based on A Reduced Feature Set. Kunsong Zhao, Jin Liu, Zhou Xu, Li Li, Meng Yan, Jiaojiao Yu, and Yuxuan Zhou. The 29th IEEE/ACM International Conference on Program Comprehension (ICPC), 2021.

EXPERIENCE

Meta Machine Learning Engineer Intern London, UK

Summer 2025

- Developed unsupervised LSTM models in PyTorch to detect hacked-disabled accounts, achieving a precision of over 70\% (guardrail) with an incremental recall of +10%.
- Collaborated with cross-functional teams to integrate and validate existing metrics, building a robust, multi-source dataset of discriminative time-series features for model input.
- Integrated the model into production systems, providing scores consumable by downstream products and as signals in routing decision-making rules.

The Hong Kong Polytechnic University

Hong Kong SAR

Research Assistant

Summer 2024

- Conducted an empirical study on Large Language Models (LLMs) based smart contract vulnerability detection methods.
- Developed an automated pipeline and benchmark tailored for Ethereum smart contract vulnerability detectors.

ZTE - Central R&D Institute

Nanjing, China

Software Engineer Intern

Summer 2023

- Researched and evaluated the application of modern ZKP systems (SNARK, STARK) for integration into ZTE's zero-trust product architecture.
- Engineered a ZKP proof-of-concept for selective identity disclosure, validating its successful integration pathway into the product line.

Syracuse University

Syracuse, NY

Teaching Assistant

Fall 2023 - Present

- Courses: Cryptography, Operating Systems, Advanced Computer Architecture, and Network Programming.
- Taught lectures with well-prepared course material, facilitated classroom discussions, and supported students through discussion sessions and one-on-one consultations.
- Collaborated with instructors to optimize teaching strategies and conveyed student feedback.

Syracuse, NY Fall 2020 - Present Research Assistant

• Explored Ethereum mem-pool protocols and implemented patches to vulnerabilities that lead to low-cost DoS attacks (acknowledged in the Official Release Notes by Ethereum Foundation).

- Analyzed smart contract vulnerabilities and tracked blockchain attacks that exploited design flaws.
- Uncovered extractable value on Blockchain from a secret keys management perspective.

Projects

GAN-Enhanced Fingerprint Recognition | Python, Generative Adversarial Networks

Fall 2021

• Improved a deep-learning based fingerprint recognition system using Generative Adversarial Networks.

Online Multiplayer Gomoku Game | Python, JavaScript, RNN

Fall 2020

• Developed an online multiplayer Gomoku game with an alternative vs-RNN-AI mode.

COVID-19 Sentiment Analysis | Python, Logistic Regression, LSTM

Spring 2020

• Utilized Logistic Regression and LSTM models to analyze and predict public sentiment on COVID-19 from social media data.

AWARDS AND CERTIFICATIONS

Travel Award: ETHDenver 2024, DSN 2022

Qualification Certificate of Computer and Software Technology Proficiency: Intermediate software designer, May 2018

First prize of Blue Bridge Cup software development competition (Java Group), March 2018

Scientific Innovation Award of College, 2018

Merit Student of College, 2016, 2017, 2019

Technical Skills

Languages: Python, Go, Solidity, PHP, Java, C/C++, C#, JavaScript, SQL, Presto Machine Learning: PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, Matplotlib

Web & Backend: Spring Boot, Node.js, Nginx, Redis, RESTful APIs

Developer Tools: Git, Docker, CI/CD, AWS, GCP, VS Code, IntelliJ IDEA