

Yuxuan Zhou

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4-294, 111 College Pl., Syracuse, NY 13210

EDUCATION

Syracuse University - The College of Engineering and Computer Science
Ph.D. in Computer and Information Science and Engineering (CISE)
M.S. in Computer Science
GPA 3.93 / 4.00

Syracuse, NY
Aug. 2021 – Present
Aug. 2019 – Dec. 2020

Hubei University - School of Computer Science and Information Engineering
Bachelor of Software Engineering

Wuhan, China
Sept. 2015 - Jun. 2019

University of Minnesota
Summer General Education Program

Minneapolis, MN
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
(Invited to SANER'2023 as part of the Journal First Track)
- 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

The Hong Kong Polytechnic University
Research Assistant

Hong Kong SAR
Summer 2024

- Conducted an empirical study on Large Language Models (LLMs) based smart contract vulnerability detection methods
- Developed and optimized prompt engineering techniques tailored for Ethereum smart contract vulnerability detection

Syracuse University

Teaching Assistant for Cryptography, Adv. Computer Architecture, and Sys. & Network Programming.

Syracuse, NY
Fall 2023 - Present

- Taught lectures with well-prepared course material and facilitated classroom discussions
- Supported students in understanding course content through lectures, discussion sessions, and one-on-one consultations
- Collaborated with the course instructor to optimize teaching strategies and conveyed feedback from students

ZTE - Central R&D Institute

Intern of Software Engineer

Nanjing, China
Summer 2023

- Summarized the latest zero-knowledge proof (ZKP) systems (SNARK, STARK) and their applications
- Conducted research on the feasibility of integrating ZKP into ZTE's established trusted computing and blockchain projects
- Developed a ZKP demo that could prove and verify select identity elements while maintaining the confidentiality of the remaining information

Syracuse University

Research Assistant

Syracuse, NY
Fall 2020 - Present

- Explored Ethereum mem-pool protocols and implemented patches to vulnerabilities that lead to low-cost DoS attack([ref.](#))
- Analyzed smart contracts vulnerabilities and tracked blockchain attacks that exploited smart contracts design flaws
- Uncovered extractable value on Blockchain from secret keys management perspective

PROJECTS

- Improved deep-learning based fingerprint recognition system with Generative Adversarial Networks
Fall 2021
- Developed the online multiplayer or vs-RNN-AI Gomoku games in Python and JavaScript
Fall 2020
- Utilized Logistic Regression and LSTM models to analyze and predict public sentiment on COVID-19
Spring 2020

- Developed inventory monitoring and automatic order placement browser plugin in Python and JavaScript **Dec. 2019**
- Completed online ordering system design using Java, Spring Boot, RESTful API, Nginx, Redis and SQL **April 2019**

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
- Merit Student of College, 2016, 2017, 2019
- Scientific Innovation Award of College, 2018

SKILLS

- Python, Go, Solidity, Java, C, C++, C#, JavaScript, SQL