Jin Yang

TEL: (+1) 315 877 1414, **E-mail:** jyang142@syr.edu
GitHub: https://github.com/JhinQaQ, Google Scholar
Address: 5785 Stonegate Hts # 5, Jamesville, NY 13078

EDUCATION

Syracuse University, College of Engineering & Computer Science Syracuse, US
Ph.D. in Computer Science, GPA: 3.8/4 Jul.2023 - 2028 (Expected)
Syracuse University, College of Engineering & Computer Science Syracuse, US
Master in Computer Science, GPA: 3.8/4 Aug.2021 - Jun.2023
South-Central University for Nationalities (SCUN), School of Computer Science Wuhan, China
B.Eng. in Software Engineering (Experimental Class), ranking top5% Sept. 2017 - Jun.2021
Honors and Awards: Triple-A Student, Student Scholarship, Excellent Student Leader, Prize for The Creative Working, First Prize in 2018 National Mathematical Modeling Contest
Teaching Assistant: Applied Nature Language Processing, Automata and Computability

PUBLICATION

Li, X., **Yang, J**., Chen, J., Tang, Y., & Gao, X. (2024, May). Characterizing Ethereum Upgradable Smart Contracts and Their Security Implications. In *Proceedings of the ACM on Web Conference 2024* (pp. 1847-1858). ***(WWW 2024)***

Yang, J., Wang, Z., Lin, Y., & Zhao, Z. (2024, Dec.). Problematic Tokens: Tokenizer Bias in Large Language Models. In *Proceedings of the 2024 IEEE International Conference on Big Data* (pp. 6387-6393). ***(BigData 2024)***

PROJECT&RESEARCH EXPERIENCE

Research on **Blockchain Security** and **Programming Language** Oct.2022 - present

- Conducted **static analysis** of smart contracts using **Slither**, identifying and mitigating vulnerabilities in decentralized applications.
- Tracked and analyzed Maximal Extractable Value (**MEV**) across decentralized exchanges over 1M USD, delivering insights to enhance transaction fairness and efficiency.
- Designed hands-on blockchain security labs(BADD Labs) adopted by 200+ students, fostering practical skills in Ethereum **smart contract** design and implementation.
- Researched **Datalog**-based equality saturation system, analyzing its incremental execution and composable analyses for potential applications in **program optimization**.

LLM Security(ProblematicTokens) Jan.2024 - present

- Lead research on **hallucinations** in Large Language Models (**LLMs**), identifying causes of erroneous outputs.
- Proposed novel methodologies to test the accuracy and reliability of LLM-generated content.
- Analyzed model behavior under diverse conditions, providing actionable insights to improve real-world LLM applications deployed on **AWS**.

Seed Lab(SEED-emulator), Syracuse University Jan.2022 - May.2022
*Participated in the improvement of seed-emulator (involved **HTTPS**, **TLS**, **SSH**, and wireless security protocols)*

- Enhanced the SEED Emulator by adding lightweight blockchain functionality, improving simulation throughput for Ethereum PoW by 30%.
- Utilized virtualization technologies(**VMware, Hyper-V**) to enable cross-platform software compatibility.

New Thread Lab, School of Computer Science, SCUN Jun.2018 - Aug.2020

- Designed and developed **back-end** services for the Anonymous Scoring System used by the Academic Affairs Office, leveraging the **Spring** framework to ensure user confidentiality, scalability, and operational efficiency.
- Created official websites for the School of Economics and the School of Marxism using **Bootstrap** and **RESTful APIs**, enhancing accessibility and usability.
- Used **IBM AppScan** for vulnerability assessment and penetration testing.

INTERNSHIP EXPERIENCE

Certified Kernel Tech LLC (CertiK) NYC, US
Position: Blockchain Security Expert Intern – AI Track May 2025 - Aug.2025

- Developed and optimized LLM-based auditing pipelines for smart contract security analysis.
- Increased vulnerability coverage of the RAG (Retrieval-Augmented Generation) system by 20% through improved retrieval powered by FAISS embeddings.
- Designed and implemented an automated refinement checklist to streamline the LLM auditing process, improving consistency and reducing false negatives.

SKILLS

Programming Languages: Proficient in Java, Python, Solidity; Familiar with JavaScript (React, Node.js), SQL (MySQL, MongoDB), Matlab, Kotlin, Rust, Haskell and C; Static Analysis, Full-stack Dev, Mobile Dev, Machine Learning
Tools & Frameworks: Spring, Maven, Flask, TensorFlow, Hadoop, Kubernetes, Docker, Git, Android Studio, AWS