# Kianoush Arshi

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#### EDUCATION

#### University of Tehran

2019-2024

BSc in Computer Engineering (Software)

Cumulative GPA: 18.53/20.00

## **PUBLICATIONS**

1. **K. Arshi** and A. Goharshady, "The Solitude of Greed: Congesting Blockchains with A Lonely Transaction", Under submission at *IEEE International Conference on Blockchain and Cryptocurrency (ICBC)*, December 2023

#### EXPERIENCE

## Hong Kong University of Science and Technology Research Intern

Prof. Amir Goharshady

Summer 2023-Fall 2023

- Introduced and evaluated two attacks on Ethereum, resulting in a disruption of service on the blockchain.
   These attacks were not targeted at the network level but instead took advantage of the rationality of miners.
- Developing a private decentralized banking system.
- Presented a paper on probabilistic programming titled "Positive Almost-Sure Termination Complexity and Proof Rules" to the ALPACAS research group.

### University of Tehran

Research Assistant

Prof. Behnam Bahrak

- Smart Contract Security Audits

- Spring 2023
- \* Participated in Code4rena Security Audits and discovered security vulnerabilities in smart contracts developed for DeFi projects.
- A Comparative Analysis of MEV Transactions Pre- and Post-Ethereum Merge

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- \* Implemented a framework for collecting blockchain data with high speed without setting up a node.
- \* Designed an MEV transaction classifier for detecting arbitrage and liquidation transactions.
- \* Analysed arbitrage and liquidation transactions before and after the merge.
- Monero Miner Detector

Spring 2022

- \* Developed a Monero Miner Classifier which uses the features of the network packets for detecting malicious mining on the user's browser.
- \* Attempted to optimize the detector by filtering out network packets based on their frequency

Divar
Full-stack Web Developer

Tehran, Iran
Summer 2021

- Developed a platform with many different applications in a team of 4 developers.
- Utilized several software developing tools and frameworks.

Teaching Assistant	Fall 2020-Spring 2023

- Artificial Intelligence Dr. Yaghoubzadeh, Dr. Fadaei
- Formal Languages and Automata Theory Dr. Hojjat
- Engineering Probability and Statistics Dr. Bahrak
- Compiler Design and Programming Languages Dr. Ghassemi
- Advanced Programming Dr. Khosravi
- Introduction to Computing Systems and Programming Dr. Moradi
- Technical English Dr. Fatemi

Fall 2022-Fall 2023

Fall 2021-Spring 2023

Fall 2021-Spring 2023 Fall 2022

Spring 2022

Fall 2021-Spring 2022

Fall 2020 and Fall 2021

Fall 2021-Fall 2022