

# ERFAN MOUSAVIAN

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## Summary

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Taking a blockchain-related course during my undergraduate studies familiarized me with blockchain technology and DeFi, particularly stablecoins and DEXs. After discovering my interest in Blockchain, I completed a three-month internship program at Bitex in just one month, leading to employment as a Blockchain Developer.

During my journey in the world of blockchain as a developer, I was involved in various projects that provided me with a deep understanding of some of the most popular DeFi platforms and their structures. I wrote various smart contracts, developed APIs to interact with DeFi protocols and fetch real-time data from the blockchain, and implemented bots to work with DeFi platforms.

## Work Experiences

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### Zarban.io

January 2024 – January 2025

*Blockchain developer | full-time*

*Tehran, Iran*

- Developed a mechanism similar to UniswapX which allows users to perform gas-free swaps.
- Developed Zarban Protocol's backend to support and build multistep transactions for various operations.
- Implemented executive smart contracts to change protocol configurations.
- Implemented a bot to liquidate unhealthy positions in the protocol.

### Bitex.ir

July 2022 – April 2023

*Blockchain developer | full-time*

*Tehran, Iran*

- Created a new staking system utilizing Uniswap V3 liquidity pools. Assembled the entire system, including the reward and staking mechanisms.
- Designed the ZAR token, a new stablecoin that is pegged to Iranian Rials, deployed on the Arbitrum network.
- Wrote unit tests for the ZAR token's smart contracts using the Foundry tool.
- Forked the Aave V2 protocol and deployed it on the Aurora network, allowing users to utilize flash loans for the first time on the Aurora network.

## Education

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### Sharif University of Technology

2019 – 2024

*Bachelor of Science in Computer Science, GPA: 19.21/20*

*Tehran, Iran*

*Ranked 1st out of 46 Computer Science students*

## Research Experiences

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### Blockchain Internship

July 2023 – December 2023

*Ruhr-University Bochum - Prof. Ghassan Karame*

*Bochum, Germany*

- Read about different types of front-running attacks with an emphasis on the SmartPool protocol.
- Measured the safety of smart contracts that are written by LLMs, such as ChatGPT, using various tools like Oyente, Securify, and VRust.
- Made multiple datasets using LLMs and the latest verified smart contracts of the Ethereum network.

### Algorithm and Data Structures

April 2023 – November 2023

*University of California, Riverside - Prof. Marek Chrobak*

*remote*

- Focused on two-way comparison trees and aimed to find more efficient algorithms for their creation.

## Honors and Awards

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- Top 0.3% in the Iranian National University Entrance Exam (Konkour). Rank 466 out of ~164000 participants.
- Semi-finalist at Iranian National Olympiad in Informatics (INOI). Top 80 among 10000 (Top 0.8%).

## Skills

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**Programming Languages:** C/C++, Java, Python, Julia, MIPS32, GoLang, Solidity

**Libraries:** OpenCV, PyTorch, NumPy, Scikit-Learn, JavaFX

**Technologies/Frameworks:** Git, Docker, Gradle, Foundry, Hardhat, EVM

## Languages

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- **Farsi:** Native Proficiency
- **English:** High Intermediate (TOEFL MyBest score: 100/120)