Feruz Kiflay

Software Engineer







github.com/fairouzK



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Experience

Khalifa University of Science and Technology // Abu Dhabi, UAE

Research and Teaching Assistant January 2021 - December 2022

- ▶ Write modern and robust smart contract code, conduct testing, perform cost and security analysis, deploy on test networks and publish findings in a high standard publication.
- ▶ Work with a variety of different languages, frameworks, and content management systems such as JavaScript, Node.js, Solidity, React, Remix IDE, Truffle etc.
- Collaborate with multi-disciplinary individuals and teams of professors, engineers, clients, and stakeholders on a daily basis.

Ankabut Internet Service Provider // Abu Dhabi, UAE

Software Engineer Intern June - August 2019

- Managed and deployed servers of both Linux and Windows OS in a collaborative and distributed
- Deployed virtual servers in a distributed system, run scripts for hardening servers, and inspected report generated by the scripts for vulnerabilities.
- ▶ Set up file servers and managed accessibility of shared folders and DHCP server that assigns IP addresses to joining devices.

Projects

Exchange Decentralized Application (Dapp)

December 2022

- Responsive web Dapp for sending and receiving crypto tokens.
- Display trending tokens by utilizing the CoinGecko API.

Tech: JavaScript, Solidity, MetaMask, npm, React.js, vite, APIs: CoinGecko, Giphy, Alchemy

Container NFT for Ownership Transfer and Auctioning

August 2022

- Deploy an NFT for every shipment request.
- Secure ownership transfers, cargo history transparency and traceability, and easier cargo auctioning.
- Secure shipping documentation using IPFS.

Tech: Solidity, ERC721, MetaMask, OpenZeppelin, npm, Remix IDE

Container Shipment Traceability with Ethereum Blockchain

April 2022

Research oriented, and open source - a cost effective smart contract-based implementation for container shipment traceability in international shipping.

Tech: Solidity, Remix IDE, OpenZeppelin

Design Project - Biometrics Authentication (Using Face, Iris, and ECG signal)

September 2019 - April 2020

Reduces security breaches by using face, iris, and ECG signals to authenticate a person.

Tech. Python, Google Colab

Android Theme App (Exploits Android Vulnerability)

- An application that exploited a storage permission flaw in the Android OS phones.
- Functional in APIs 9 and 10.
- Obtain access of the external storage used by the applications without the awareness of the user.

Tech. Java, Android Studio

Publications

January 2023

Journal: Blockchain-Based Traceability for Shipping Containers in Unimodal and Multimodal Logistics,

Publisher: IEEE Access.

December 2022

Journal: Using NFTs and Blockchain for Traceability and Auctioning of Shipping Containers and Cargo in Maritime Industry,

Publisher: IEEE Access.

May 2022

Journal: Artificial Intelligence for Water and Energy Nexus Demand Forecasting: A Review, Publisher: International Journal of Low-Carbon Technologies.

Education

MSc. in Computer Engineering

Khalifa University of Science and Technology Jan 2021 - Dec 2022 // Abu Dhabi, UAE

Relevant courses: Blockchain Fundamentals and Applications, Artificial Intelligence, Machine Vision and Image Processing, Deep Learning.

BSc. in Computer Engineering

Khalifa University of Science and Technology Jan 2016 - Dec 2020 // Abu Dhabi, UAE

Relevant courses: Computer Security, Operating Systems, Data Structures and Algorithms, Networking, Databases.

Skills

Programming Languages

Solidity, JavaScript (ES6), HTML, Tailwind CSS, Python, PHP, Java, C/C++

Libraries & Frameworks

React, Node.js, Ethers, OpenZeppelin, Express, SQL, npm

Tools & Platforms

Git, Remix IDE, Truffle, Hardhat, MetaMask, Ganache, Alchemy, Pinata, Infura, Oyente, Ethereum Blockchain, Microsoft Azure