

# Shiro M.

## Architect/Team-lead Senior Blockchain Engineer

### SUMMARY

- A technology professional with 5+ years of experience in the blockchain industry, I specialize in the development of secure and reliable distributed ledger applications and smart contracts.
- I am highly skilled in Ethereum, Aptos, Polkadot, and other distributed ledger technologies. Additionally, I have experience building and managing blockchain networks, developing core components and custom modules, deploying and operating blockchain nodes, and creating BaaS functionality for enterprise customers. My skillset also includes working with Solidity, Golang, Rust, Move, Cosmos SDK, CosmWasm, DeFi, DEX, and Multi-Chain Metaverse.
- Try to learn new things and update your knowledge. Committed to the clients and always work with 100% client satisfaction.

### TECHNICAL SKILLS

|  |  |
|--|--|
| <b>Main Technical Skills</b>                     | Blockchain   |
| <b>Programming Languages</b>                     | C, C++, Go, JavaScript, Rust, Solidity, TypeScript |
| <b>.NET Platform</b>                             | Azure  |
| <b>UI Frameworks, Libraries, and Browsers</b>    | CSS, HTML5, Material UI, Tailwind CSS              |
| <b>JavaScript Libraries and Tools</b>            | Ethers.js, Web3.js                                 |
| <b>JavaScript Frameworks</b>                     | Express, Next.js, Node.js, React                   |
| <b>Databases &amp; Management Systems / ORM</b>  | MongoDB, MySQL                                     |
| <b>Cloud Platforms, Services &amp; Computing</b> | AWS, Azure, GCP                                    |
| <b>Industry Domain Experience</b>                | Blockchain   |
| <b>Collaboration, Task &amp; Issue Tracking</b>  | Atlassian Trello, Jira                             |



|   |  |
|---|--|
| <b>Deployment, CI/CD &amp; Administration</b>       | CI/CD, Jenkins   |
| <b>Third Party Tools / IDEs / SDK / Services</b>    | Cosmos SDK   |
| <b>BlockChain and Decentralized Software</b>        | CosmWasm, Cryptography, DeFi, Ethers.js, ETH (Ethereum blockchain), NFT, OOPS, Polkadot, Smart Contract, Substrate |
| <b>Virtualization, Containers and Orchestration</b> | Docker, Kubernetes   |
| <b>Version Control</b>                              | Git  |
| <b>SDK / API and Integrations</b>                   | GraphQL, RESTful API   |
| <b>Mail / Network Protocols / Data transfer</b>     | GRPC   |
| <b>Methodologies, Paradigms and Patterns</b>        | Kanban, Scrum  |

## EXPERIENCE

### Senior Blockchain Engineer, BlockchainMind, Toronto, Canada

Oct 2021 - Jan 2023

#### Responsibilities:

- Developed a novel implementation of the EVM that supports zero-knowledge proofs (ZK-EVM), enabling private and efficient execution of smart contracts for sensitive applications such as financial services and healthcare.
- Participated in the development of core-level and application-level blockchain software for Tendermint/Cosmos-SDK and Ethereum-based blockchains.
- Designed and implemented a decentralized exchange (DEX) protocol for the multi-chain Metaverse ecosystem on Polkadot using Substrate, which successfully handled thousands of trades per day with high security and scalability.
- Developed and contributed to the creation of various smart contracts and applications using Solidity, which are now being used by multiple blockchain networks and have been audited by top security firms for their robustness and reliability.
- Deployed Aptos blockchain's DeFi with lending/borrowing, leverage yield farming protocol using PancakeSwap, LiquidSwap, AUX Exchange.
- Built an Aptos blockchain-based voting system that ensured transparent and tamper-proof election results.
- Developed a cross-chain bridge solution for transferring assets between different blockchain networks, which enabled users to seamlessly transfer



cryptocurrencies and tokens between Ethereum and other blockchains. The solution was widely adopted and contributed to the interoperability of different blockchain networks.

- Implemented Cosmwasm smart contract(NFT marketplace, presale, etc) on Cosmos-based ecosystem.
- Developed a suite of tools and libraries for testing and deploying smart contracts, using best practices such as automated testing, code coverage analysis, and CI/CD.

### **Senior Blockchain Engineer, Rabipearl, Manchester, UK**

Oct 2019 - Sep 2021

#### **Responsibilities:**

- Set up an EVM-compatible chain based on Cosmos SDK and implemented a vote escrowed mechanism for native token holders.
- Created and maintained a popular ERC-20 token standard implementation that is widely used by other developers and integrated into various blockchain platforms.
- Contributed to the development of a decentralized autonomous organization (DAO) that enables community governance and decision-making, using Solidity and web3.js technologies.
- Successfully designed and implemented a decentralized application (DApp) with a highly performant frontend using the Svelte framework, which has been praised for its intuitive user interface and seamless integration with the blockchain backend.
- Implemented and optimized smart contracts using Solidity, resulting in significant cost savings in gas fees and improved transaction throughput.
- Created a decentralized autonomous organization (DAO) using smart contracts, which enabled community members to propose and vote on various decisions related to the project's development and management.
- The DAO successfully executed several proposals and funded various initiatives.
- Implemented a custom governance mechanism for a decentralized finance (DeFi) platform, which enabled users to participate in decision-making processes related to the platform's development and management. The mechanism helped increase community engagement and participation.
- Contributed to the development of a privacy-focused cryptocurrency using zk-SNARKS technology, which enabled users to transact anonymously and securely. The project gained significant attention from the privacy-focused community and received funding from several investors.
- Implemented a custom consensus algorithm for a private blockchain network, which significantly improved the network's throughput and reduced transaction confirmation times.
- Collaborated with clients to understand their requirements and deliver innovative solutions.

### **Blockchain Developer, YPTOKEY, Berlin, Germany**

Sep 2017 - Aug 2019

#### **Responsibilities:**

- Created a blockchain integration library packed with several modules, including price feed, smart contract interaction, token metadata fetching,



and wallet interaction allowing fast and smooth front-end blockchain integration.

- Developed and implemented a design for a Distributed Ledger Technology (DLT) using Golang to facilitate a secure and efficient trading platform for cryptocurrency.
- Designed and implemented a decentralized lending platform using web3.js and Ethereum, which enabled borrowers to receive loans without intermediaries and lenders to earn interest on their funds with high liquidity.
- Built a peer-to-peer payment system using web3 technologies, including a mobile application built with Svelte, which has been praised for its ease of use and security features.
- Released an NFT marketplace on Ethereum network which can create, design, buy, and sell NFTs in one place.
- Collaborated with cross-functional teams to create a suite of developer tools and libraries for web3 DAOs, which have been adopted by a variety of decentralized organizations and helped to increase transparency and accountability in their governance processes.
- Designed and implemented a backend infrastructure for a DApp, including a scalable database and API server, which enabled the application to handle large volumes of user data and requests.
- Collaborated with engineering and product teams to design, launch, and manage the network.

### **Full-stack Developer, kadasolutions, Zurich, Switzerland**

Jul 2015 - Jul 2017

#### **Responsibilities:**

- Implemented pixel-perfect front-end by design.
- Developed an automated system for monitoring and managing the network.
- Implemented SEO (Search Engine Optimization) to existing websites Retrieved data from multiple, different storage APIs.
- Redesigned the homepage, PDP, listing pages, checkout, cart page, third-party payment systems, variations, blog articles, glossary, and more.
- Built a complex e-commerce platform using Vue.js that resulted in a 20% increase in sales for the company.
- Developed and maintained a large-scale content management system using React that improved content delivery and management for a major publishing company.
- Through A/B testing of different components and combinations improved customer conversion rate by 17%, representing \$500,000+ in incremental annual revenue.
- Experienced with Git, CI/CD, Agile Methodology, AWS, and GCP.

## **EDUCATION**

### **Bachelor's Degree, Computer Science, Osaka University**

GPA 3.65

Apr 2011 to May 2015

