# Joni Laitinen

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### **SUMMARY**

**Blockchain Engineer** skilled in Rust, Go, and Solidity, with expertise in building blockchain infrastructure, protocols, smart contracts, and dApps.

**Rust Engineer** adept in system programming, Wasm, backend systems, web applications, and blockchain technology.

#### **SKILLS**

## **Programming Languages:**

Rust, Go, Solidity, Python, TypeScript, JavaScript

#### **Blockchain:**

Solana, Polkadot, Ethereum, Arbitrum, Polygon

Infrastructure, Protocol, Smart Contract, Layer1, Layer2, DeFi, DEX, Consensus Algorithms, Cryptography, Cybersecurity, NFT, dApps, Crypto Game, Bot

### **Libraries & Frameworks:**

Anchor, Substrate, Serum, Hardhat, Truffle, Rollup, Wormhole, Tokio, Serde, Rocket, Diesel, Handlebars, ink!, Libp2p, Rust-Bitcoin, Actix, Actix Web, Seed, Wasmer, Stdweb, Clap, Wrap, Gin, Fiber, gRPC, Protobuf, RabbitMQ, Kafka, Web3.js, Ethers.js, Polkadot.js

### Web:

Node.js, Express, GraphQL, HTML5, CSS3, React, Next.js, NestJS, WebSocket, Material UI, Bootstrap, Tailwind CSS

## DevOps:

AWS, Google Cloud, Github, Docker, Jira, Jenkins, Kubernetes, Microsoft Azure

## Database:

MongoDB, MySQL, SQLite, PostgreSQL, Sequelize, Redis

## **PROFESSIONAL EXPERIENCE**

## Senior Blockchain Engineer

07/2022 - 08/2024

- Engineered high-performance Solana programs(Smart Contracts) using Rust and the Anchor framework, optimizing transaction latency by 20% and increasing throughput by 30% for DeFi applications and NFT games.
- Architected and developed custom DEX platforms, integrating features such as AMMs, liquidity pools, and DAO governance, achieving 99.9% uptime and processing over \$1 million in transactions daily.
- Built customized blockchain infrastructures and protocols using Rust with Substrate and ink!, improving scalability by 25% and reducing network latency by 20%.
- Integrated blockchain solutions for secure interactions and enhanced decentralized functionalities using Wormhole for cross-chain messaging, achieving a 40% improvement in cross-chain transaction efficiency.
- Led the development of smart contracts using Solidity on Ethereum, focusing on performance optimization and security, including compliance with EIP-4337 standards, resulting in a 30% reduction in gas fees and zero critical vulnerabilities.
- Automated testing scripts in Python for backend systems, enhancing the CI/CD pipeline, reducing deployment times by 35%, and increasing code reliability across blockchain protocols and dApps.

Honey Finance 07/2021 - 06/2022

## Blockchain Protocol Engineer

 Developed and implemented NFT lending and borrowing protocols using Rust, integrating with Solana, Polygon, and Arbitrum, achieving a 50% increase in transaction throughput and an 80% reduction in gas fees.

- Engineered high-performance smart contracts for variable interest rate loans and liquidity pools using Rust on Solana and Solidity on Ethereum, focusing on cross-chain interactions to leverage Solana's high throughput and reduce transaction costs by up to 60%, improving processing efficiency by 40%.
- Enhanced the Honey DAO governance framework by creating tools with TypeScript and Node.js to streamline voting and proposal management, improving governance participation by 35% and facilitating more effective decision-making.

<u>Jungle Cats</u> 04/2021 - 06/2021

## Smart Contract Engineer

- Designed and implemented smart contracts for the Jungle Cats NFT project on Solana, using Rust and Anchor to handle over 10,000 NFT transactions efficiently.
- Integrated Metaplex for NFT minting and metadata management, enhancing contract functionality and optimizing interactions with the Solana blockchain.
- Utilized Solana CLI and localnet for deployment and testing, achieving a 30% improvement in contract performance and ensuring secure, scalable NFT operations.

<u>Bifrost</u> 10/2020 - 03/2021

## Rust/Typescript Engineer

- Developed staking smart contracts in Rust for Polkadot, leveraging Substrate's modular framework and achieving a 30% increase in cross-chain liquidity through XCMP (Cross-Consensus Messaging).
- Engineered backend infrastructure with Rust and WebAssembly (Wasm) to enable secure cross-chain staking operations, reducing transaction latency by 40%.
- Built RESTful APIs in Rust and Node.js to facilitate real-time communication between the frontend and blockchain nodes, ensuring 99.9% uptime.
- Built the frontend with React.js and TypeScript, improving transaction processing times by 20% through optimized WebSocket handling.
- Integrated Polkadot.js API and Substrate RPC nodes to facilitate staking management and governance voting, overseeing more than \$5M in staked assets across multiple blockchain ecosystems.

<u>RumbleFish</u> 07/2017 - 09/2020

## **Backend Engineer**

- Contributed to building Radicle's decentralized protocol by designing and optimizing peer-to-peer communication using Rust's libp2p and mio libraries, improving message propagation speed by 30% and ensuring reliable network connectivity.
- Implemented cryptographic identity and authentication mechanisms using libsodium and ring libraries in Rust, enhancing security for code collaboration by 40%.
- Engineered microservice architecture and backend systems in Rust using Actix and Tokio, enhancing system scalability and reducing latency by 40% for high-traffic client applications.
- Developed and optimized RESTful APIs with Go and the Gin framework, implementing advanced authentication and rate limiting, leading to a 30% increase in API performance and security.
- Developed cloud-native backend solutions in Go using Docker, Kubernetes, streamlining CI/CD pipelines and reducing deployment times by 50%.
- Implemented real-time data streaming platforms in TypeScript using Node.js, NestJS, and RxJS, providing low-latency solutions for high-reliability data delivery.

Oulu University 05/2013 - 04/2017

## Bachelor's degree in Computer Science

- Operating System, Data Structures and Algorithms, Programming Language
- Networking, Database Management, Web Development
- Cryptography, Cybersecurity, Blockchain Technology
- Software Design Principles, Software Engineering, Project Management