

# Hamza Hamud

Rust Software Engineer | Distributed Systems | Performance Engineering  
<https://www.hamzahamud.com>

Email: [work@hamzahamud.com](mailto:work@hamzahamud.com)

Github: [github.com/hhamud](https://github.com/hhamud)

## EXPERIENCE

---

### Supra Labs

*Rust Software Engineer*

Contract

*January 2025 – August 2025*

- Enabled realistic stress testing of Supra's P2P network and Moonshot BFT consensus layer by building a high-throughput Rust benchmarking suite with adversarial traffic profiles.
- Improved protocol performance under peak load by using benchmark data to identify bottlenecks, reducing end-to-end latency by 17% and stabilizing throughput.

### Kakarot Labs

*Rust Software Engineer*

Freelance

*July 2024*

- Improved regression coverage for Kakarot's RPC storage layer, increasing confidence in Ethereum block data retrieval and reducing the risk of storage-layer regressions.

### StarkWare

*Rust Software Engineer*

Freelance

*January 2024 – June 2024*

- Contributed to Madara (Starknet sequencer) and Cairo Native compiler infrastructure by streamlining node startup, making multi-node testnet genesis deterministic, strengthening CI/build automation, improving RPC error consistency, and simplifying Rust error handling across the stack.

### SpaceShard

*Rust Software Engineer*

Freelance

*April 2024 – May 2024*

- Improved performance regression visibility for Starknet Devnet by adding memory benchmarking and allocation tracking to the Rust test suite.

### Aztec Labs

*Software Engineer*

Contract

*July 2023 – September 2023*

- Improved Noir developer tooling by designing and implementing a custom Tree-sitter parser and editor integration support for syntax-aware code analysis.

### Dxdao

*Software Engineer*

Permanent

*January 2021 – May 2023*

- Shipped production Web3 governance and crowdfunding applications across front-end, smart contract, and integration layers using React, TypeScript, GraphQL, Node, Solidity, and Hardhat.

## EDUCATION

---

### The University of Sheffield

*Master of Engineering in Chemical Engineering*

Sheffield, United Kingdom

*Class Two Division One Honours*

## TECHNICAL SKILLS

---

**Languages:** Rust, TypeScript, Python, SQL, Solidity

**Rust / Systems:** Async Rust, Tokio, Substrate, RPC, distributed systems, Tree-sitter, Criterion, benchmarking, testing, performance optimization

**Infrastructure:** Docker, Kubernetes, GCP, Grafana, Prometheus, CI/CD