MUHAMMAD RILWAN

SENIOR SOFTWARE ENGINEER

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PROFILE SUMMARY

Results-driven Software Engineer with 2+ years of experience building scalable systems, performant applications and well-maintained SDKs. Deep expertise in **EVM-based smart contracts** and **TypeScript-based systems**. Proven ability to drive full-stack projects from design to deployment.

WORK EXPERIENCE

Senior Software Engineer (Fullstack)   Aug, 2024 - Present
SPH Media, Singapore

- Built an internal **NextJS-inspired web framework** using React, AWS Lambda, and CloudFront to support SSR, ISR, and CSR with integrated authentication modules.
- Built **TypeScript SDKs** and **internal libraries** (logging, caching, monitoring) for developer teams across AWS and non-AWS products.
- Authored **technical documentation**, conducted **performance benchmarking**, and ensured SDKs met **scalability** and **latency targets.**
- Designed edge caching strategies and optimised CloudWatch integrations, reducing **monitoring costs by 30%** and **20% faster load times**.

Software Engineer/ Blockchain Intern   June, 2024 - Aug, 2024
Nethermind, London Area, United Kingdom

- Conducted **in-depth technical research** on consensus models, restaking mechanisms and protocols, and other research areas.
- Designed and implemented data models to extract and analyse on-chain data, providing data visibility and insights.
- Performed **smart contract audits** to identify critical vulnerabilities for clients and implemented secure remediation solutions

Blockchain Developer Intern   Nov, 2022 - Mar, 2023
Altonomy, Singapore

- Conducted comprehensive analysis of **Just-In-Time (JIT)** liquidity mechanisms in Uniswap v3 pools to **quantify impermanent loss patterns** for liquidity providers, developing **data-driven dashboards** using **GraphQL** to visualize findings and optimize LP strategies

Software Engineering Intern,   May, 2022 – Nov, 2022
Ministry of Home Affairs (MHA) Singapore

- Built enterprise-grade **backend systems** using **NestJS** and **Flask**, processing high-volume data securely and efficiently and designed **CI/CD pipelines** with automated testing and linting, **reducing deployment friction** by **40%**.

EDUCATION

National University of Singapore
B.Comp, Information Systems (Honors)

TECHNICAL SKILLS

Languages: TypeScript/Javascript, Solidity
Frameworks: Next.js/ React, NestJS,, Flask, Foundry