# Sidath Ranasinghe

**Full-Stack Engineer · Node.js & Next.js · Real-Time Systems & API Integrations**

Kegalle, Sri Lanka | (+94) 76 557 2291 | sidath.ranasinghe.work@gmail.com

linkedin.com/in/sidath-ranasinghe | github.com/SidathRanasinghe | sidath.ryzeniclabs.com

## PROFILE

Full-stack engineer with 4+ years of production experience, specialising in Node.js backends, real-time WebSocket systems, and third-party API integrations, with frontend delivery in Next.js and Angular. Built a real-time chat application end-to-end, migrated a failing live-streaming layer onto AWS IVS, and reworked a telecom payment gateway integration across a breaking major API version. Currently lead developer and architect on a production real estate platform operating in the UAE and Sri Lanka. Comfortable owning architecture, delivery, and production operations. Open to international relocation and on-site engagements.

## WORK EXPERIENCE

**Lead Developer / Full-Stack Engineer (Independent)** **June 2025 – Present**

*Independent Engagements — Sri Lanka*

Deliver and maintain production systems for clients in real estate, e-commerce, and construction under ongoing maintenance agreements.

- **PurpleRoof (**purpleroof.com**):** Lead developer and architect. Restructured a stalled Laravel monolith into a service-oriented Node.js platform: five NestJS services behind a PKCE-based SSO gateway, five Next.js portals, and three internal npm packages published to GitHub Packages. Implemented role-based access control with audit logging, JWT authentication, Prisma/MySQL migrations, and GitHub Actions CI/CD on a PM2-managed CentOS server. Work within a five-person team on two-week sprints. Live in production since March 2026.
- **SA Gems (**ceylonsagems.com, torontosagems.com**):** Dual-brand gemstone e-commerce platform on Express.js and MongoDB with Next.js/RTK Query frontends. Designed the customer request workflow, a 48-hour gem reservation system, and a cron-driven interest queue with automatic expiry. Deployed via Docker on AWS EC2 with S3, CloudFront, SES, and Secrets Manager.
- **SA Construction (**saconstructions.app**):** Marketing single-page application built with Next.js 16 and Tailwind v4 (CSS-first @theme), React 19, scroll-triggered animations, and SEO-optimised metadata.
- **Ryzenic Labs (**ryzeniclabs.com**):** Co-founded a software services practice with two partners, focused on full-stack product engagements for regional clients.

**Senior Software Engineer** **November 2024 – May 2025**

*FocalId Technologies (Pvt.) Ltd. — Mirigama, Sri Lanka*

- Built a reusable force-directed network graph component in D3 for visual link analysis, after benchmarking vis-network and finding it degraded badly at high node counts. Delivered it after resolving a Next.js version incompatibility; adopted across multiple client dashboards.
- Established front-end state-management patterns (Redux, Context API) and code-quality standards for the team.
- Mentored junior developers, participated in agile ceremonies, and translated UI/UX designs into responsive implementations.

**Software Engineer** **June 2024 – October 2024**

*FocalId Technologies (Pvt.) Ltd. — Mirigama, Sri Lanka*

- Built a custom JavaScript and jQuery annotation tool that streamlined internal data-labelling workflows.
- Integrated open-source data platforms (n8n, DataHub) to extend analytics capability for enterprise clients.

**Software Engineer** **June 2022 – May 2024**

*Simato Solutions (Pvt.) Ltd. — Sri Jayawardenepura Kotte, Sri Lanka*

Delivered full-stack development across IDEAMART Appmaker (appmaker.lk) and STARS-LIVE (starslive.lk).

- **P2PChat —** Designed and built a real-time chat application end-to-end: a Sails.js backend from scratch, an Angular and Angular Material frontend, and the full Socket.IO transport layer. Shipped as a self-contained application within the Appmaker platform.
- **StarsLive live streaming —** Replaced a failing third-party streaming implementation with AWS IVS, working directly from the service documentation. Eliminated recurring midstream failures and introduced adaptive bitrate delivery with automatic resolution switching. Integrated Video.js as the client player.
- **StarsLive fan interaction queue —** Built the fan-to-celebrity session queue over Socket.IO across both frontend and backend; diagnosed and resolved dropped-session and blank-stream defects in the live call flow.
- **Genie payment gateway (Dialog, Mobitel) —** Migrated the integration across a breaking major API version, reworking endpoints for MSISDN detection, subscription initiation, renewal callbacks, and subscription status validation.
- Contributed to simato-commons, the shared internal npm module used across platform services. Integrated Google Analytics, Google Maps, Google Sheets, and Google OAuth 2.0; mentored a junior developer, and optimised database queries (MongoDB) for data-heavy screens.

**Software Engineer Intern** **July 2020 – July 2021**

*Simato Solutions (Pvt.) Ltd. — Sri Jayawardenepura Kotte, Sri Lanka*

Extended beyond the standard six-month term on performance. Contributed to IDEAMART Appmaker (appmaker.lk) alongside final-year university studies.

## TECHNICAL SKILLS

- **Core (production depth):** Node.js, Express.js, Sails.js, JavaScript (ES6+), Socket.IO / WebSockets, REST API design, MongoDB, Mongoose, Waterline ORM, Angular, HTML/CSS, Git, PM2, Jira.
- **Working proficiency:** React, Next.js, NestJS, TypeScript, Tailwind CSS, shadcn / Radix UI, Prisma, D3.js, GitHub Actions, Cordova, Ionic.
- **Familiar:** MySQL, PostgreSQL, Redis, Docker, AWS (EC2, S3, IVS, CloudFront, SES, Secrets Manager, IAM), Nginx, Passport.js, Swagger / OpenAPI, Zod, React Hook Form, Framer Motion, GSAP.

## EDUCATION

**B.Sc. (Hons.) in Information Technology** **2017 – 2022**

*Faculty of Information Technology, University of Moratuwa, Sri Lanka*

- **Coursework:** Data Structures and Algorithms, Object-Oriented Programming, Object-Oriented Analysis and Design, Web Technologies, Database Management, Network Systems, Artificial Intelligence, Computer Architecture, and more.

**G.C.E. Advanced Level - Physical Science Stream** **2016**

*Dharmaraja College, Kandy, Sri Lanka*

- **Z-Score:** 1.6335 — Chemistry (A), Physics (B), Combined Mathematics (C).

## LANGUAGES

- **English** (Full Professional Proficiency)
- **Sinhala** (Native)

## REFERENCES

Available on request — *former engineering managers at FocalId Technologies and Simato Solutions.*