ASHEN PERERA

SENIOR FULL STACK ENGINEER

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Senior Software Engineer with 6+ years of experience building multi tenant B2B SaaS, travel tech, and fintech products with Node.js, NestJS, React, Next.js, .NET, and AWS. Ships LLM features to production with OpenAI and a fine-tuned Mistral model backed by Pinecone vector search. Designs secure REST APIs, tunes PostgreSQL performance, automates delivery with GitHub Actions, Terraform, and Docker, and builds AI assisted workflows with Claude Code. Has built booking and payments products, including an AI restaurant booking platform and a PCI-compliant Mastercard API with tokenized payments. Protects tenant data across EU and US regions with tenant-scoped authentication, ownership checks, and penetration-test fixes.

PROFESSIONAL EXPERIENCE

Senior Software Engineer | Docupath **Feb 2026 – Present**

Full-stack Node.js and React engineering with LLM features, CI/CD, and AWS infrastructure for a multi tenant B2B SaaS platform serving EU and US regions.

</> Backend & Multi-Tenant Architecture:

Built 19 NestJS, TypeORM, and PostgreSQL modules for an XML mapping service (64 API routes, 52 Jest test files), with a database-per-tenant design, JWT authentication,and an idempotent SQS consumer for a Lambda job pipeline.

</> Frontend Engineering:

Developed the visual mapping editor and admin screens in React and Vite with Vitest tests, and shipped 59 pull requests on the main React app (TanStack Query, Tailwind CSS), including input validation on about 50 fields.

</> AI Integration & Tooling:

Added rate limiting, AI logging, and a feature flag to OpenAI backed features and fixed the rule generation prompts; built a Claude Code agent workflow (about 20 skills, 8 hooks) and benchmarked AI code review on real review rounds.

</> Cloud Infrastructure & CI/CD:

Moved the Playwright E2E suite to AWS Fargate Spot with Terraform (ECS,ECR,Step Functions, EventBridge) and GitHub Actions over OIDC, and brought a 123-case regression cycle to 123/123 passing.

</> Performance & Security:

Cut a 20,000-document search from 5.0 s to 21 ms in testing with a pg_trgm GIN index, made a count query 21x and a token lookup 213x faster, and fixed penetration test findings in authentication, sessions, and object level authorization.

Senior Software Engineer | Centronixx (PVT) Ltd. **Apr 2024 – Feb 2026**

</> Reservato AI Web Chat & Admin Portal:

Architected an AI chat and restaurant booking platform with Next.js, OpenAI, and Firebase, and built a Next.js admin portal on AWS Amplify with role based access control and analytics.

</> Nourah AI Travel Assistant:

Developed a Flutter app that plans trips in real time with OpenAI and AWS (Lambda, API Gateway, RDS, VPC).

</> Fine-Tuned Mistral Model:

Built and deployed a RAG pipeline that answers restaurant-recommendation questions with a fine-tuned Mistral Large model grounded in Pinecone vector search, which reduced hallucinations on domain questions.

</> DFCC Bank Mastercard Payments API:

Developed a PCI-compliant PHP REST API for the Mastercard Payment Gateway with tokenized payments, OAuth2 and JWT authentication, and SQL transaction auditing.

Software Engineer | Infragist (PVT) Ltd. **May 2022 – Mar 2024**

</> Liwe Condominium Management App:

Built a property management platform with React.js, React Native, MongoDB, and Firebase to manage community operations.

</> Catmonocle Quiz Game:

Led development of a multiplayer quiz game (React.js, .NET MVC, MySQL, AWS) with global matchmaking and leaderboards.

</> Love Ticket NFT Event Ticketing Platform:

Built an NFT-based ticketing system on the Solana blockchain with React.js that issues verifiable event tickets on a decentralized marketplace.

</> ScribeIT Healthcare Documentation:

Built a medical reporting app with React.js, PostgreSQL, and Firebase that captures voice notes and syncs them to a secure web portal.

Junior Software Engineer | Afisol (PVT) Ltd. **Sep 2021 – Apr 2022**

</> Material Ordering System (MOS):

Developed a material management and reporting system for Trelleborg with ASP.NET and SQL Server that tracks inventory and automates sales reports.

Intern Software Engineer | IAS Solutions (PVT) Ltd. **Sep 2020 – Sep 2021**

</> Web Development:

Designed, built, and tested software features with HTML, CSS, and JavaScript, and wrote test plans against the technical requirements.

EDUCATION

National Institute Of Business Management (NIBM) | Sri Lanka

BSc (Hons) in Computing/Software Engineering **Jan 2023 – Jan 2024**

Higher National Diploma in Software Engineering **Feb 2022 – Dec 2023**

Diploma in Software Engineering **Jan 2019 – Jan 2021**

TECHNICAL SKILLS

.Net | C# | JavaScript | TypeScript | React | Next.js | React Native | Flutter | Dart | PHP | PostgreSQL | MySQL | MongoDB | AWS | Firebase | OpenAI API | REST API | Angular | Node.js | NestJS | Express | TypeORM | Playwright | TanStack Query | Tailwind CSS | Python | Docker | GitHub Actions | Terraform | Vitest | Vite | PHPUnit | Claude Code | Mistral