Gihan Gunarathne

Senior Software Engineer

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Professional Summary

Senior Software Engineer with over 5 years of experience specializing in Java and Spring Boot, alongside proficiency in Python and Flask. Experienced in developing fintech and SaaS products, with a strong understanding of design patterns and software architecture principles. A collaborative team player known for quickly adapting to new technologies and delivering high-quality solutions. Successfully contributed to projects across diverse domains, including insurance systems, restaurant management, and real estate industry applications.

Technical Skills

- Languages: Java, Python, JavaScript, TypeScript
- Frameworks & Libraries: Spring Boot, Flask, React.js, Redux
- Databases: MySQL, PostgreSQL, Redis
- Authentication: Keycloak, AWS Cognito User Pool
- AI & LLM Tools (API-level): OpenAI, Gemini, DeepSeek, LangChain, LlamaIndex, RAG Pipelines
- Integrations: Stripe, Authorize.net, SendGrid, Twilio
- DevOps & Tools: Docker, Git, AWS (EC2, S3, RDS), CI/CD
- Testing: JUnit, Postman, Mockito
- Other: REST APIs, Microservices, Agile/Scrum, Software Architecture, Design Patterns

Professional Experience

Senior Software Engineer

Jun 2023 - Present

UNIVISER, Colombo, Sri Lanka

- Migrated a monolithic Laravel system to Java Spring Boot microservices for around 1,000 active clients.
- Implemented multi-tenant architecture and AWS Cognito for secure and scalable user management.
- Developed REST APIs consumed by a React.js frontend and optimized PostgreSQL performance.
- Mentored junior developers and conducted regular code reviews to uphold engineering best practices.
- Contributed to Agile delivery and CI/CD pipelines for faster and more reliable deployments.

Software Engineer Jun 2022 – Jul 2023

atlacarte, London, United Kingdom (remote)

- Developed a modular Java backend integrating Oracle Simphony for seamless POS and venue operations.
- Designed and implemented an LLM-based Al ordering assistant using the OpenAl API, including custom prompt engineering and context handling for dynamic user interaction.
- Applied foundational LLM principles (prompt chaining, temperature control, role conditioning) to enhance assistant accuracy and responsiveness.
- Containerized and deployed services using Docker, with scalable infrastructure on AWS Elastic Beanstalk, DNS via Route 53, and CDN setup with CloudFront.

Full Stack Engineer

Jan 2020 - May 2022

Bueno, Miami, United States (remote)

- Built Java Spring Boot APIs for hotel/tour data from 7+ GDS systems and Google Ads CRM integration.
- Integrated SMS gateways, payment platforms, and bulk email servers for marketing and client outreach.
- Delivered travel apps and landing pages using PHP, React.js, HTML/CSS/JS, and Figma.

Education

BSc Engineering (Hons) in Computer Engineering

Dec 2015 - Jul 2020

Faculty of Engineering - University of Peradeniya, Sri Lanka Graduated with Honors, GPA: 3.25/4.0

G.C.E. Advanced Level (Physical Sciences Stream)

Jan 2003 - Jul 2014

Kingswood College, Kandy, Sri Lanka

Passed with grade "A" for all main subjects, achieving Z-score of 2.3968 (Island Rank: 176)

Projects & Open Source Contributions

Orinec BoT - AI Based Chat Application

2024 - Current

chat.orizel.com

Designed and developed an Al-powered chat system for lead capture and automated routing, improving efficiency and response time.

- Built a real-time AI chat system for lead capture and routing using a RAG pipeline with LangChain, OpenAI, and LlamaIndex.
- Developed scalable REST APIs in Spring Boot and a dynamic frontend in React.js.
- Designed a flow-control schema for seamless chat logic and automation.
- Managed cloud infrastructure and deployments on AWS, following DevOps best practices.

Real Estate Al Platform – Unit Price Prediction (VIDA)

2024 - Current

app.thereally.com

Developed an ML-driven pricing engine to predict unit prices based on historical sales and unit features, reducing dependency on manual sales input.

- Built an ML-powered platform to predict unit prices based on historical data and features.
- Designed scalable backend with Spring Boot and managed data with PostgreSQL.
- Integrated LLMs (OpenAI) for dynamic email content, document summaries, and client interactions.
- Automated document generation and e-signing via DocuSign API.
- Implemented web scraping scripts to pull real-time market data.
- Added visual floor plan, commission calculator, and auto-generated reporting modules.

rc-geographic (NPM Package)

Open Source - Current

npmjs.com/rc-geographic

JavaScript utility for retrieving countries, states, cities, and their coordinates.

- Built utilities to fetch country list, states by country, and cities by state, latitude and longitude.
- Published and maintained as an NPM module.

GeNet: Web-Based Gene Expression Analysis Tool

2020

genet.orizel.com — IEEE Publication

A user-friendly web application for end-to-end microarray gene expression data analysis, including preprocessing, visualization, clustering, feature selection, prediction, and result validation.

- Developed backend for data processing, prediction, and validation.
- Integrated ML workflows using Python, Flask, and R.

References available upon request.