

Heshan Karunaratne

Software Engineer

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Summary

Highly motivated **Full Stack Developer** with over **5 years of experience** delivering **creative technical solutions** across web applications. Proven ability to design and build **scalable, reliable** software that meets **tight deadlines**. Possesses **strong expertise** in Amazon Web Services.

Work Experience

Associate Tech Lead

Oct 2022 - Mar 2024

Mitra Innovation

[Watch On Nature](#)

- Took the responsibility of supervising the **architectural design and development** of the project.
- Authored the **Architecture Document**, including **architectural goals, trade-offs, processes, and logical diagrams**.
- Streamlined **CI/CD** process for multiple teams in **Bitbucket**.
- Designed and developed an admin landing page using **Next.js** and **React Leaflet**.

Technology Stack: Next.js, React Leaflets, PostgreSQL, Tailwind CSS, Bitbucket, REST API, AWS EKS, Docker

[TailElf](#)

- Implemented **JavaFX SceneBuilder** for User Interface development and Java for **back-end services**.
- Successfully resolved **75% software glitches**, showcasing my strong **troubleshooting skills**.

Technology Stack: Java, JavaFX SceneBuilder

Senior Software Engineer

Nov 2021 - Sep 2022

Mitra Innovation (Outsourced to Sysco LABS)

Merchandising Modernization (Sysco LABS)

- Using **Talend Data Integration Tool**, designed 'Prod Order Verification' and deployed to **AWS Elastic Container Service** via **GoCD pipeline**, resulting in a **70% reduction** in manual data verification efforts.
- Improved **application monitoring** by developing a **Kibana Dashboard** that combines the above tool with **ElasticSearch**.
- Carried out **performance testing** to ensure optimal software performance.
- Applied **Postgres Change Data Capture(CDC)** via **AWS Managed Streaming for Kafka** for **real-time** data pipelines.
- Migrated **Apache Beam pipelines** from **Kinesis** to **Kafka**, **optimized data transfer**, and deployed on **AWS Kinesis Data Analytics**.
- Maintained **80% unit test coverage** and **resolved all SonarQube issues** throughout the project.

Technology Stack: Java, SpringBoot, React.js, Talend Data Integration Tool, GoCD pipeline, Kibana Dashboard, ElasticSearch, DataDog, PostgreSQL, CDC, AWS MSK, AWS S3, AWS KDA, AWS ECS, AWS EC2, AWS CloudWatch, AWS Parameter Store, AWS IAM, Apache Beam, Kinesis, Kafka, SonarQube, REST API, Terraform, Junit, JIRA, Confluence, GitHub

Senior Software Engineer

Apr 2020 - Oct 2021

Axiata Digital Labs

[Genie Stocks](#)

- Orchestrated extensively with **React JS** and focused on **state management** using **Redux** for a **stock trading application**.
- Developed over **10 RESTful APIs**, integrated **third-party APIs**, and expertly directed **PostgreSQL** database.
- Demonstrated a strong understanding of **Object-Relational Mapping (ORM)** principles and leveraged **Hibernate** to **streamline database** interactions.
- Enforced **Server-Sent Events** to enable **real-time** updates and **continuous data flow** to the front end.

Technology Stack: Java, SpringBoot, React.js, SonarQube, Redux, REST API, Jasper Report, PostgreSQL, Hibernate, Server-Sent-Events, Kafka, Jenkins, JIRA, Microservices, Spring Security

[LesiPay/eZLoan](#)

- Effectively used **Docker Compose** to define and execute **multi-container** applications.
- Leveraged **payment gateways** to optimize **financial processes**, with a deep understanding of various **Fintech solutions**.

- Successfully utilized **circuit breaker patterns** like **resilience4j** to **handle failures** and **prevent cascading failures**, thus ensuring the **robustness of microservices** in **distributed systems**.
- Leveraged **Pentaho Data Integration** to create a daily job generating **PostgreSQL materialized view** for **20 million customer records**.
- Used **WSO2 Enterprise Service Bus (ESB)** to convert between **XML** and **JSON** formats while working seamlessly.

Technology Stack: Java, SpringBoot, SonarQube, REST API, PostgreSQL, WSO2 ESB, Pentaho Data Integration Tool, Docker, Microservices

Software Engineer

Apr 2019 - Mar 2020

Axiata Digital Labs

One Wallet

- Have an understanding of **digital wallets** and **mobile banking applications**.
- **Introduced Unit tests** and achieved a **test coverage** of **over 90%** for new code changes.

Technology Stack: Java, SpringBoot, MSSQL

SAQ-Contract Initiation

- As the **Technical Lead** on the project, I ensured the timely **delivery of tasks** and presented our progress in **sprint show-and-tell sessions**.
- Built the application using **ProcessMaker's** integration with **JavaScript**, **jQuery**, and **PHP**.
- Collaborated on creating **Entity-Relationship (ER)** diagram and overseeing data **persistence** in **MySQL** database.
- Provided essential **assistance to the team** and facilitated with **deploying production processes**.

Technology Stack: ProcessMaker, JavaScript, JQuery, PHP, MySQL, JIRA

Trainee Software Engineer

Aug 2018 - Mar 2019

Dialog Axiata PLC

DMS vs SAP Reconciliation

- I developed the **automation of SAP** processes using **Python**, streamlining and enhancing **operational efficiency**.

Technology Stack: Python, ActiveMQ

Taxation

- Created a **Java Spring Boot microservices-based** application to automate the Taxation process.
- Developed a custom email component using **Free-marker templates** to differentiate between email types based on their subject lines.
- Incorporated **ActiveMQ** to ensure **effortless communication** with other applications.
- Played an active role in **scrum ceremonies**, contributing to **project progression** and **team collaboration** following agile practices.

Technology Stack: Java, SpringBoot, ActiveMQ, Java, Free-marker Templates, Microservices

Certification

- AWS Certified Developer - Associate (2023)
- AWS Certified Cloud Practitioner (2023)
- Google Cloud Certified Professional Cloud Architect (2021)
- AWS Certified Solutions Architect - Associate (2020)
- Processmaker Certified Advanced Architect (2019)
- RPA Developer (2019)

Education

Bachelor of Science (Hons) in Applied Sciences (Computer Science)

University of Sri Jayewardenepura, 2015 - 2018

- Second Class Honours (Upper Division)

Non Related Referees

Available on request