

# SHALON FERNANDO

## SOFTWARE ENGINEER INTERN

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[Portfolio](#) | [LinkedIn](#) | [GitHub](#)

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### SUMMARY

Self driven third year undergraduate specialising in Software Engineering with strong expertise in web application development using **MERN, Next.js, Python, React Native, and Spring Boot**. Skilled in both frontend and backend, with hands-on project experience creating **RESTful APIs**, integrating **MySQL/MongoDB**, and building responsive user interfaces. Proven ability to deliver impactful, user focused solutions, contribute effectively in **agile** engineering teams and communicating technical concepts across teams. Eager to apply adaptable technical skills, problem solving mindset, and collaboration to a Software Engineering position.

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### TECHNICAL SKILLS

**Languages** Java | Python | JavaScript/TypeScript | Kotlin | Html | CSS | C | C++ | PHP

**Frameworks** React (Next.js, Vite) | Spring Boot | Node/Express | Flask | React Native

**Databases** MySQL | MongoDB

**Cloud & DevOps** Vercel | AWS | Docker

**Tools** Git | JPA/Hibernate | JWT | FAISS | TailwindCSS | Three.js/@react-three/fiber

**Methods** OOP | DSA | REST API design | Agile/Scrum

**Testing & QA** Postman

**Data & AI/ML Tools** LangChain | OpenAI API | Hugging Face | PyTorch | RAG

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### EDUCATION

Sri Lanka Institute of Information Technology(SLIIT)— B.Sc. Hons. in Information Technology Specializing in Software Engineering.

Dean's List (GPA 3.74), Year 1 Semester 2 - [Certificate](#)

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### SELECTED PERSONAL PROJECTS

#### National AI-Optimized Disaster Platform for Sri Lanka - Hackathon Project-1st RunnerUp (Codefest 2025, SLIIT) | [GitHub](#)

Designed a dual-platform disaster management solution with a React Native mobile app for citizens (SOS alerts, incident reporting, AI-powered safety assistant, risk maps) and a React web dashboard for government authorities (real-time monitoring, SOS tracking, resource allocation, analytics). Integrated SLUDI authentication, GPS-based reporting, and WebSocket-powered live updates.

(React Native, React, Express.js, MongoDB Atlas, WebSockets, Google Maps API, Dialogflow/Rasa, OAuth2)

#### Avyra – Game Download Platform | [GitHub](#) | [Link](#)

Built a full-stack game download platform inspired by Steam, featuring game browsing, purchasing, reviewing, and secure downloading. Integrated JWT-based authentication, PayPal Sandbox for payments, and a Gemini API-powered chatbot assistant. Designed a fully responsive 3D UI using React Three Fiber and implemented role-based download protection.

(React, Vite, Tailwind CSS, React Router, Spring Boot, Spring Security, JPA, Hibernate, JWT, MySQL, PayPal API, GSAP)

#### PDF Chat AI | [GitHub](#)

Developed a Streamlit-based AI assistant that enables users to upload and interact with PDFs using natural language queries. Used FAISS for semantic search and Hugging Face models for retrieval-augmented generation. Supports multi-PDF uploads, conversational memory, and efficient CPU-bound inference.

(Python, Streamlit, FAISS, Hugging Face Transformers, instructor-xl, flan-t5-large)

#### Arogya – Patient Management System | [GitHub](#)

Designed a role-based healthcare system to manage patient records, appointment scheduling, and medical file uploads. Integrated Appwrite for authentication, database, and real-time SMS notifications. Added 3D model integration to enhance patient interaction.

(Typescript, Nextjs, React, Tailwind CSS, Appwrite, React Three Fiber, HTML, CSS, JS)

#### Item Inventory & Maintenance System | [Github](#)

Full-stack application to manage inventory, usage logs, and maintenance tracking. Implemented role-based JWT auth, real-time stock alerts, and exportable PDF/CSV reports. Integrated 3D model viewer for asset inspection and visual analytics via charts.

(React, Node.js, Express.js, MongoDB, JWT, Three.js, Chart.js, jsPDF)

## CERTIFICATIONS

1. **AWS for Beginners** — Simplilearn (Issued Jul 2025) Credential ID: 8640308
2. **Getting Started with AWS Cloud Essentials** — AWS/Skillbuilder.
3. **Agile Scrum Foundation** — Simplilearn (Issued Jul 2025) Credential ID: 8557338
4. **Front-End Web Development** — University of Moratuwa (Issued Jul 2025) Credential ID: qFUzVohsmY
5. **Generative AI for Beginners** — Simplilearn (Issued Jul 2025) Credential ID: 8588189
6. **Getting Started with Docker** — Simplilearn (Issued Jul 2025) Credential ID: 8576333
7. **GitHub Basics** — Simplilearn (Issued Jul 2025) Credential ID: 8559322
8. **Hugging Face Projects** — Simplilearn (Issued Jul 2025) Credential ID: 8647177
9. **Introduction to Kanban** — Simplilearn (Issued Jul 2025) Credential ID: 8640416
10. **Introduction to Prompt Engineering** — Simplilearn (Issued Jul 2025) Credential ID: 8590124
11. **Introduction to Prompt Engineering with GitHub Copilot** — Simplilearn (Issued Jul 2025) Credential ID: 8592998
12. **JavaScript for Beginners** — Simplilearn (Issued Jul 2025) Credential ID: 8630648
13. **Langchain Course for Beginners** — Simplilearn (Issued Jul 2025) Credential ID: 8598970
14. **Prompt Engineering Applications** — Simplilearn (Issued Jul 2025) Credential ID: 8592443
15. **Front End Development Libraries** — freeCodeCamp (Issued Jun 2025) Credential ID: fcc-62c83883-49b6-4a77-ad3b-10e101db8211-fedl
16. **Full-Stack Development 101** — Simplilearn (Issued Jun 2025) Credential ID: 8524763
17. **Introduction to PHP** — Simplilearn (Issued Jun 2025) Credential ID: 8521990
18. **JavaScript Algorithms and Data Structures** — freeCodeCamp (Issued May 2025) Credential ID: fcc-62c83883-49b6-4a77-ad3b-10e101db8211-jaads
19. **Python for Beginners** — University of Moratuwa (Issued May 2025) Credential ID: wK3BwjZLBs
20. **Responsive Web Design** — freeCodeCamp (Issued May 2025) Credential ID: fcc-62c83883-49b6-4a77-ad3b-10e101db8211-rwd
21. **Web Design for Beginners** — University of Moratuwa (Issued May 2025) Credential ID: jPtem2uirl
22. **RAG Course for Beginners** — Simplilearn (Issued July 2025) Credential ID 8709708

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## ACHIEVEMENTS & LEADERSHIP

- **SLIIT Basketball Team** – Power Forward/Center ; coordinate plays & mentor first year recruits. Fiba 3X3 profile - [Link](#)
- **Vipers** 3X3 open category basketball team - Team Lead.

## HACKATHONS & COMPETITIONS

- **Team Lead – 1st Runner Up, ReviveNation** Hackathon (Codefest 2025, SLIIT) – Led a multi disciplinary team to design and develop an innovative AI-driven disaster management solution under tight deadlines - [Certificate](#)
- **Finalist, VibeFlow AI Hackathon** by STEM LINK – prototyped edtech web app with documentation in 6h - [Certificate](#)
- **Team Lead – Tech Triathlon** (Rootcode) – Led a team in a multi-round technology challenge, overseeing project strategy, task delegation, and rapid prototyping.

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## REFERENCES

### Chamath Thiwanka

Cortana Technologies/CEO

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