

# Dharane Segar

Colombo, SriLanka | dharaneseGAR08@gmail.com | +9477 889 36 15 | Dharane Segar-Portfolio  
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## Summary

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Motivated final-year Software Engineering undergraduate at SLIIT, with a strong passion for leveraging technology to address real-world challenges. I am proficient in programming, software development methodologies, and full-stack development, with hands-on experience across both frontend and backend technologies. Currently completing my degree and actively seeking a Software Engineer or Full Stack Developer role in a forward-thinking organization, where I can contribute effectively while continuously expanding my technical expertise.

## Experience

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**Software Engineer Intern**, WSO2 – SriLanka Aug 2023 – Jan 2024

- Worked primarily on backend service development and API exposure using WSO2's Integration tools.
- Built industry-specific demo solutions for banking and airline sectors.
- Containerized the solutions with Docker and maintained GitHub repositories with clear documentation.
- Collaborated cross-functionally to ensure usability and customization for clients.

## Education

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**Sri Lanka Institute of Information Technology (SLIIT)** - BSc (Hons) in June 2021 – Present  
Information Technology Specializing in Software Engineering

- CGPA: 3.82/4.0 (as of the end of third year)

**Hindu Ladies' College, Colombo – 06**, Jan 2007 – Oct 2020

- GCE Advanced Level (2020) - Combined Mathematics – A, ICT – B, Physics – C, General English - A
- GCE Ordinary Level (2017) - 9 As

## Projects

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**BioMentor - Intelligent Summarization Tool for A/L Biology - Research Project** Link

- Developed the summarization component of BioMentor using a fine-tuned Flan-T5 model with voice output, multilingual note generation, and keyword extraction with definitions. Added YouTube video suggestions and used RAG for improved content relevance. Chose a monolithic architecture after comparing with microservices for better performance and simplicity.
- Tools used: Python, FastAPI, Hugging Face, FAISS, gTTS, MongoDB, React.js, Azure, Docker, Google Colab.

**iCorner - e-Commerce Web and Mobile application** Link

- It includes a Web application for managing users, products, orders, and inventory, along with a mobile application for customers to browse products, place orders, and track their status. Supports features like role-based access, real-time notifications, and multivendor order management.
- Tools used: C#, ASP.NET, React.js, Bootstrap, MongoDB, Java, Android Studio, IIS.

**LearnHub - e-Learning Platform** Link

- An online educational platform implemented in microservices architecture for course browsing, enrollment, and progress tracking. It includes tools for instructors to manage courses, administrators to oversee the system and payments, and learners to access multiple courses.
- Tools used: React.js, Node.js, MongoDB, Docker, Docker Compose, Tailwind CSS

**Solar Flare - Web application for an optical store** Link

- A web-based platform for an optical store that allows users to virtually try on glasses using their device's camera. It enables browsing a wide range of styles, providing a personalized and interactive shopping experience.
- Tools used: React.js, Node.js, Express.js, Python, OpenCV, MongoDB.

### **Farm Connect - Mobile Application for farmers and customers**

[Link](#)

- A mobile application connecting farmers directly with customers, enabling farmers to list their products and customers to browse, bid on prices, and make purchases. The system sends reminders to farmers about products nearing their expiry date and offers weather monitoring features.
- Tools used: Flutter, Dart, Node.js, Express.js, MongoDB, Figma

### **LuxuryX - e-Commerce Website and Web Application**

[Link](#)

- An e-commerce platform with a comprehensive system to manage employees, suppliers, products, customers, orders, deliveries, promotions, and finances. It features both a website and web app to streamline operations and improve order, supplier, and financial management.
- Tools used: Node.js, Express.js, React.js, MongoDB

### **MedPro - Healthcare Mobile Application**

[Link](#)

- This Android application allows users to book appointments with doctors, schedule lab tests, and buy medicines directly from their mobile devices.
- Tools used: Kotlin, Android Studio, SQLite

## **Technologies**

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**Languages:** HTML, CSS, JavaScript, TypeScript, Java, Kotlin, C#, Dart, Python

**Frontend:** React.js, Next.js, Redux, Material UI, Bootstrap, Tailwind CSS

**Backend:** Node.js, Express.js, Spring Boot, ASP.NET, FastAPI

**Mobile:** Android (Kotlin, Java), Flutter, Dart

**Databases:** MySQL, MSSQL, MongoDB, SQLite

**Tools, DevOps, Version Control & Design:** Visual Studio, VS Code, IntelliJ, Android Studio, Docker, npm, Postman, Linux, Azure, Heroku, Vercel, Render, Snyk, Git, GitHub, Jira, UML, Figma, Markdown

## **Honors & Awards**

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**Dean's List Award:** Year 1 Semester 1 & 2, Year 2 Semester 1 & 2, Year 3 Semester 2 and Year 4 Semester 1

**Continuous Prize Winner:** Annual School Prize Giving (2008 – 2020)

## **Publications**

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**Enhancing E-Commerce Experience through Virtual Fitting Rooms: A Case Study of Real-Time Virtual Try-On for Eyewear Selection** - Tuijin Jishu/Journal of Propulsion Technology

Nov 9, 2023

<https://propulsiontechjournal.com/index.php/journal/article/view/1385>

## **Extracurricular Activities**

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Development Team member of Microsoft Club of SLIIT

Senior Prefect (2019/2020)

ICT, Chess, Science Union Member

## **References**

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### **Ms. Karthiga Rajendran**

Lecturer - Faculty of Computing | Department of Software Engineering, SLIIT | Malabe Campus  
karthiga.r@sliit.lk

### **Dr. Jeewanee Bamunusinghe**

PhD (Monash), BSc (Hons) (Peradeniya)  
Assistant Professor - Department of Information Technology, SLIIT | Malabe Campus  
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