+94 75 826 4839
Mt Lavania, Dehiwala

Asiri Jayawardena

Asirijayawardena920@gmail.com
GitHub | LinkedIn

EDUCATION

Malabe	Sri Lanka Institute of Information and Technology	June 2022-Present

Bachelor of Science in Information Technology Specializing in Software Engineering.
Relevant Coursework- Java OOP, Web Programming, OSSA, Data Structures, and Algorithms and Android development.

Academic Achievements
- Current CGPA- 3.94/4.0
- Dean's List recipient for Y1S1, Y1S2 ,Y2S1 and Y2S2

EXPERIENCE

Intern	Sysco Labs	September 2024-Present

Quality Assurance Engineering. Experience in test automation, performance testing, test case design, and test case writing. Experience with the Micro Service Architecture and AWS services (Enterprise Grade).

PROJECTS

- **AI/ML Football Analysis system with YOLO, OpenCV, and Python-** Used a pre-trained model YOLOv5xu. Additional training was done to identify only the players and referees within the football court. Use of ball interpolation for predicting the ball's path and tracking the ball, use of color segmentation to assign players with team color, use of camera movement estimators and perspective transformer to calculate the speed and distance covered by each player within the desired polygon.
- **Medi Plus Hospital Management System-** As the Lead Developer, I was responsible for building the foundation of a comprehensive Healthcare Management System using the MERN stack (MongoDB, Express.js, React.js, Node.js). My role involved implementing multi-factor authentication and role-based access control to ensure system security. I developed a fully integrated patient management system catering to both inpatient and outpatient care and incorporated customer support features to enhance user assistance. Additionally, I integrated third-party APIs, including Google Authentication, for secure login. The completed system was successfully delivered to the client, receiving an A grade for its excellence and functionality.
- **Food Delivery WebApp-** Group project developed using the **JAVA servlets, JSP, SQL, and Bootstrap**. Complete food delivery app with user, support, inventory, payment, coupon, and review management functionalities. Core OOP concepts of JAVA were explored in this project and many design patterns such as singleton were incorporated for this project. Submitted for OOP and received a score of 100%.
- **Spring Boot Application Based on Micro Service Architecture –** Spring Boot application with complete microservice architecture implemented. **Key Cloak** for authentication, **Kafka** for asynchronous communication, **Grafana** for observability of the APIs, and complete **Circuit Breaker** pattern implemented for all the APIs. All services with the corresponding modules are deployed to **Kubernetes**.
- **Coffee Shop with LLM RAG System-** A simple coffee shop application with a complete **RAG** system. Complete agent system implemented comprising of guard agent- prevents unnecessary prompts of the user from being unanswered by the **LLM**, Classification agent – capable of guiding the users to the relevant agent based on user prompt, Order agent- adds orders of the user to the cart, Recommendation agent- provides recommendations to the user based on statistical data which the model was trained with and a Details agent- provides details about the coffee shop and menu item details to the user by allowing the **LLM** to access a Vector database(**Pinecone**) comprising about the details about the coffee shop. The model used in this application was **Llama 3.0** and endpoints were deployed to **Runpod**. The applicated was built using React Expo and the backend was deployed to Docker.
- **Waste Management Application (Zero Waste)-** Several components were implemented to provide a robust waste management application. With automated driver assignments, tracking waste levels and requests based on several criteria such as district and waste categories, a complete dynamic system with the creation

of districts, driver profiles, and waste categories. This system was implemented with a **Node** backend and a **React** front end.

EXTRA-CURRICULAR

Membership	**IEEE in SLIT**	**December 2023-Present**

- Design Lead - Perpetual 4.0, IASpire, Design Co-Lead – Interfuse 24, Design member- Lazarus 2.0, Finance Co-Lead- ILLUMIN 24, Finance member- JamborIEEE, CyberShiled, INSL (Innovation Nation Sri Lanka)-Design member

Membership	**AIESEC in SLIT**	**February 2024-Present**

- OCVP Partnership Development- Kokila Rawaya 2024

Batch Rep	**SLIT Metro Campus**	**August 2023-Present**

- Batch representative for Y2.

TECHNICAL SKILLS

Languages/Tools/Frameworks/Concepts
- Java (Object Orientated Programming), PHP, JavaScript, HTML/CSS, Spring Boot, Docker and Kubernetes
- MERN, SQL, Kotlin, C, C++, Git, Agile methodology, Data structures and algorithms

REFERENCES

Dr. Kalpani Manathunga
Head of Department Software Engineering, Contact- 077 350 3324, Email- kalpani.m@sliit.lk
Mrs. Anjalie Gamage
Senior Lecturer, Contact- 077 350 3324, Email- anjalie.g@sliit.lk