AVISHKA SHAMENDRA

A hardworking, energetic final-year undergraduate with a passion for software development and a talent for problem solving. Seeking an opportunity as a software engineer to embark on a fulfilling and challenging career journey.

Research Interests:

Cloud Computing & Architecture, Cloud Security & Privacy, Serverless Computing, Micro-services

EDUCATION

University of Moratuwa, Sri Lanka

2018 - 2023

Bachelor of the Science of Engineering Honours, First Class Computer Science & Engineering

- Cumulative GPA: 4.13/4.20
- Gold Medal for the Best Performance in Computer Science & Engineering Rank 1/128
- Dean's List: Semester 1, 2, 3, 4, 5, 6, 7 & 8

Nalanda College, Colombo, Sri Lanka

Graduated in 2017

G.C.E. Advanced Level 2017 (Physical Sciences)

- 4As | Country Rank: 94 | Z-score: 2.314 (top 0.5%)
- National university entrance examination taken by more than 270,000 students

EXPERIENCE

Software Engineer - WSO2 LLC.

July 2023 – Present

Sri Lanka, USA

- Designed and developed the metrics module in Choreo Connect, a cloud-native API gateway
- Engaged in the research and development of the API Governance Module for WSO2 API Manager
- Technologies: Maven, Java, Kubernetes, Docker, Go

Software Engineering Intern - WSO2 LLC.

May 2020 - July 2021

Sri Lanka, USA

- Developed the OAUTH2/FHIR Scope Management Module for the WSO2 Open Healthcare solution
- Technologies: Maven, Java, FHIR

Software Engineering Intern - iXD Labs (Pvt) Ltd.

May 2020 – May 2021

Tech Startup in Sri Lanka

- Collaborated with a small team to complete projects within a given time frame and gained experience in API development, web and mobile application development
- Technologies: Python, Flutter, Node, React, PostgreSQL, Firebase

RESEARCH & PROJECTS

TruFaaS - A Trust Verification Framework for FaaS

Sep. 2022 – June 2023

Final Year Research Project

UbiSec 2023 Publication | GitHub

- Introduced a novel trust verification framework architecture to calculate and verify the trust of functions on a FaaS platform
- Technologies: Go | Docker | Kubernetes | Fission Serverless Framework

UniLabs Inventory Management System

Academic Project - Software Engineering Module

July 2021 – Dec. 2021 GitHub | YouTube

• Designed and Developed barcode based automated inventory management system for university laboratories

• Technologies: Django | React-Redux | Flutter-BLoC | PostgreSQL

Agro Wholesale Market

Dec. 2020 - Feb. 2021

Academic Project

GitHub

• Designed and developed a web-based system which allows farmers to post about their harvested produce for sale and wholesale buyers to privately respond with bids, following MVC architecture.

• Technologies: Node | Express | PostgreSQL | React

Airline Reservation System

Dec. 2020 - March 2021

Academic Project - Database Module

GitHub

 Developed a complete airline reservation system which enables customers to book flights and airline management to schedule flights, using advanced database concepts such as transactions, indexing, and views

• Technologies: Node | Express | PostgreSQL

COVID-19 Situational Analysis Dashboard

March 2021

Personal Project

GitHub

• Used to provide COVID-19 case figures to Sri Lankans through the API of the Health Promotion Bureau

• Technologies: React | React-Redux | Google Charts

Mobile Application Projects

2020

Personal Projects

GitHub-Timetable App | GitHub-Mora GPA App

• My Timetable App: State of the art application for school children to keep track of their timetable. Had 5000+ downloads on Play Store before the app was retired.

• Mora GPA App: Designed for undergraduates of University of Moratuwa to keep track of their GPA. Had 400+ downloads on Play Store before the app was retired.

• Technologies: Flutter

Mora dARts - An AR Darts Game

Feb. 2023

Academic Project

<u>GitHub</u> | <u>Video</u>

• A single-player AR dart game for mobile devices created using the Unity game engine and the features of AR Foundation

• Technologies: C# | Unity

COMPETITIONS & HACKATHONS

Top Ten IEEEXtreme 14.0, 15.0, 16.0

Consistently ranked among the top ten in Sri Lanka for three consecutive years

Winner Decode 1.0 - 2021

Winner of the individual programming hackathon organized by the ACM student chapter of University of Moratuwa

Winners Dentsu RiseUp Challenge Sri Lanka - 2022

Pitched *Food Pulse Application* to minimize food waste in hotels & shops by redistributing excess food

Finalists TADHack Sri Lanka - 2022

Reached the finals of TADHack telecom application development hackathon with the *Food Pulse Application*

TECHNICAL STRENGTHS

Programming Languages Java, Python, Go, JavaScript

Databases MySQL, PostgreSQL, H2, Cloud Firestore

Web Development Django, Node.js, Express, React

Mobile Development Flutter

EXTRA CURRICULAR ACTIVITIES

IT/Marketing Director - IAESTE, Sri Lanka

2022/23

IAESTE is a global non-profit organization offering students international technical internship opportunities. Was Responsible for all IT & marketing activities, including the development of <u>IAESTE Sri Lanka website</u>

President - Science Society, Nalanda College

2016/17

Led the school science society overseeing all activities and programs organized by the society

References available upon request