Anju Chamantha

Software Engineer | Computer Science & Engineering Graduate

Wadduwa, Sri Lanka
+94 778396415
linkedin.com/in/anjuchamantha

anjuchamantha.17@cse.mrt.ac.lk
github.com/anjuchamantha
anjuchamantha.github.io/portfolio

Profile

I am a Computer Science & Engineering graduate with good skills, attitude, and passion for learning and willing to give my best into whatever I do. Have an interest in designing and developing mobile & web solutions and love to do robotics & IoT projects during my leisure time. Seeking a career opportunity in the field of Software Engineering.

Education

University of Moratuwa
23rd Aug 2017 – 31st July 2022
B.Sc. (Hons) in Computer Science Engineering

3.78 GPA (First class)
Dean's List – Semesters 1, 4, 5, 6, 7

ESOFT Metro Campus
Diploma in IT (3rd Oct 2016 - 10th Oct 2017)
Python Programming Course (6th Feb 2017 - 30th Sept 2017)

Sri Sumangala College, Panadura
2008 - 2016
GCE A/L (2016) Physical Sciences stream - 2A's (Mathematics, Physics), 1B (Chemistry)
GCE O/L (2013) - 8A's, 1B (English Literature)

1.9898 Z-Score

Working Experience

WSO2 – Software Engineer   01st MAY 2022 – PRESENT

I joined WSO2 as a fresh graduate and contributed to the following areas/projects as an OB (Open Banking) R&D team member.

- WSO2 Product Training (Courses: WSO2 Identity Server, WSO2 API Manager, WSO2 Open Banking)
  Before start working on projects, I followed the WSO2 training courses on each of the above mentioned WSO2 products, which gave me an overall understanding of their features and architectures.

- WSO2-OB-3.0 Testgrid onboarding (Worked with: AWS , Cloud Formation Scripting, VMs, Puppet, Testing)
  As the first project I got to onboard OB product v.3.0 to WSO2 Testgrid. The project goal was to create a pipeline to deploy new OB-3.0 products in AWS and run the automated tests against those before releasing new updates to that product version.

- Implement JARM (JWT secured Authorize Response Mode) support for WSO2 Identity Server (Tech Stack: Java)
  This is a new feature I implemented for WSO2-IS by adhering to the JARM specification for OAuth2. The goal was to implement a new JWT-based mode to encode OAuth authorization responses where clients are enabled to request the transmission of the authorization response parameters along with additional data in JWT format.

- Analyze and resolve security vulnerabilities in third-party dependencies in WSO2-OB-2.0.0 Product
  The goal of this task was to detect vulnerable third-party dependency versions packed inside WSO2-OB-2.0.0 and upgrade them with safer non-vulnerable dependency versions.

WSO2 – Software Engineering Intern   5th OCT 2020 – 31st MAR 2021

My internship project was to develop a mock banking mobile application to authenticate users, grant their consent using biometric authentication, and push notifications with CIBA (Client Initiated Back Channel Authentication) protocol. In addition, I developed a new custom local authenticator for WSO2 Identity Server to send push notifications to the user's registered mobile device. (Tech Stack: Flutter, Java)

HexcodeLabs – Former Head of Software Development   MAR 2021 – DEC 2021

HexcodeLabs (hexcodelabs.lk) is a tech startup focused on developing solutions for client needs such as mobile and web apps, machine learning and IoT projects etc. Glad to be the Head of the Software Development team where I planned and managed software projects with both developers and clients. I have successfully managed and completed 4+ projects providing architectural guidance and leadership. (Projects: Perks, Beecon, FitnessApp, TimeBuddy etc.)

Skills & Interests

Technical Fields	Full Stack Development (Web & Mobile), IoT, Robotics
Programming Languages	Java, Python, JavaScript, Dart, C++
Frameworks & Tools	Flutter, Django, Flask, Angular, Arduino
Databases	MySQL, PostgreSQL, Firebase

Courses & Certificates

Google Cloud Platform Core Infrastructure	Coursera | Google Cloud	MAY 2020
RESTful API with HTTP and JavaScript	Coursera | Guided Project	JULY 2020
Introduction to Self-Driving Cars	Coursera | University of Toronto	JUNE 2020
Front-End Frameworks: Bootstrap4	Coursera | Hong Kong University	JULY 2020
Python Data Visualization	Coursera | Rice University	MAY 2020
Networking Essentials	Cisco	MAR 2020
Introduction to packet tracer	Cisco	OCT 2019

Projects

Final Year Research Project   Python \| ML \| Pandas \| Numpy   APR 2021 – APR 2022

My Final Year Research Project is a group project of two students, which falls under the domain of HCI. The research area is to use Smartphone Sensing and ML for human eating behavior and mood recognition while eating. We have submitted a journal paper on our research at IEEE Access : Sensing Eating Events in Context.

EMonitor – Environment Monitoring System   Microcontroller \| Flask \| PostgreSQL   OCT 2020 – NOV 2020

EMonitor is a microcontroller based device which gets environmental data via sensors and sends those data to a back-end database server using CAP(Common Alert Protocol). The device also features self fault recovery mechanisms and it also can send warning e-mails in case of any sensor data exceeding a given threshold value. The data & stats can be viewed from the device display as well as from the website. Medium Article: EMonitor

MediLab – Medical Lab Management system   Django \| PostgreSQL \| HTML \| CSS   OCT 2020 – DEC 2020

This is a web-based system developed for a network of medical laboratories in Sri Lanka, to manage branches, patients, lab-officers and lab reports replacing the old manual system. Lab officers can generate and print medical reports directly through the system, while registered patients can also view their lab reports via the website.

Perks – Appointment Scheduling System   Flutter \| Firebase   MAR 2021 – DEC 2021

Perks is a project I managed when I was in HexcodeLabs which was developed to a Sri Lankan client company. It is a platform where customers can schedule appointments for different services published by different merchants. This project is currently in the initial marketing stage to Sri Lankan saloon owners.

Cellyzer – Call Details Records Analyzing Library   Python \| Dash \| Numpy \| HTML \| CSS   FEB 2020 - JUNE 2020

Cellyzer is a python library to analyze CDR (Call Detail Records) data and visualize them using the Cellyzer GUI. It can handle call, message and cell (antenna) records. This library helps to get interesting information such as connections between users, population and traffic details etc. using call detail records.

Covid19 Bubble Detector App   Flutter \| Firebase   OCT 2021

This is a mobile application to replace the current QR code based or manual book writing process when entering into a shop in the current pandemic. Customers who are registered to this system can just enter the shop and their presence is marked wirelessly. If a Covid19 patient is identified, system finds necessary clusters and notify others accordingly.

Micromouse Robot – Flood fill Algorithm   C++ \| Arduino \| STM32   AUG 2019

A small Micromouse robot developed for the SLIIT Robofest competition. I developed the robot-controlling algorithm, which is to drive the robot to reach the goal through a maze with the smallest possible time. Optimized to run in the small memory in STM32.

Neomerce – E Commerce Web App   NodeJS \| PostgreSQL \| HTML \| CSS   OCT 2019 - DEC 2019

Single vendor e-commerce web application, which allows customers to buy products and generates statistic reports for the store-administration.

Awards & Achievements

HackX Startup Challenge – Mobile App (2019) - University of Kelaniya	Winners
IESL Robo Games - Walking 4-legged Robot (2018) - IESL & University of Moratuwa	Winners
Hacktitude Hackathon (2022) – 99x.io	Runners Up
XO-Bot Robotic Competition (2019) – IESL & University of Jaffna	Runners Up
RealHack 2.0 Hackathon (2019) - University of Kelaniya	Runners Up
IESL Idea Challenge - Dengue Prevention App (2018) – IESL & University of Moratuwa	Runners Up
Stay Home Coding Challenge (2020) - optimizesolutions.lk	Runners Up
Physics Olympiad, Sri Lanka (2016) – Institute of Physics Sri Lanka	Bronze Medal
SLIIT RoboFest (2019) - Speed Micromouse – SLIIT Institute	Participation
Mathematics Olympiad (2012) – SL Olympiad for Mathematics Foundation	Zonal 1st place
Mathematics Quiz Competition (2011)	Zonal 1st place
Best Student of the Year Awards (Both 2015 & 2016) - Sri Sumangala College, Panadura	

Extra-Curricular Activities

Head of Committee - CSE Insight Hub Renovation (2023)

Batch Representative - CSE17 batch (2021 - 2022)

MoraSprit – Former Sports Photographer (2018 -2019)

Volunteering – Teaching O/L Maths in rural areas (2017)

Organizing Committee Member – IESL RoboGames (2019)

Event Organizing – Decrypt (2019), CSE Night (2019)

Non-Related Referees

Prof. Indika Perera
(indika@cse.mrt.ac.lk)
Former Head of Department,
Computer Science & Engineering,
University of Moratuwa

Mrs. Lalaji Sureshika
(lalaji@wso2.com)
Associate Director / Architect in Engineering,
WSO2