

Dalana Dharmathilake

Software Engineer

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I'm a software engineer with expertise in high-performance systems and cloud-native development, and I have a passion for creating efficient, scalable, and user-friendly software solutions. With a diverse skill set and a commitment to continuous learning, I thrive in dynamic environments and enjoy tackling complex engineering challenges.

EXPERIENCE

Software Engineer | LONDON STOCK EXCHANGE GROUP

June 2024 – Present | Full Time | Malabe, Sri Lanka

- Contributed to the development of high-throughput, low-latency post-trade clearing solutions in modern C++ (STL/Boost) and Java.
- Designed a proof-of-concept for autoscaling stateful C++ components, improving fault tolerance and optimizing resource utilization.
- Developed a tool to analyze memory snapshots of applications to identify potential performance bottlenecks.

Software Engineer | FUELBACK

Nov 2023 – June 2024 | Contract | Colombo, Sri Lanka

- Directed cloud infrastructure modernization by migrating from Kubernetes to serverless AWS architecture (ECS Fargate, Aurora RDS, Lambda), reducing monthly costs by upto 50
- Integrated LankaQR/JustPay Payment Network, designed with an architecture and framework aligned with CBSL Guidelines.
- Engineered native Kotlin POS system with Jetpack Compose, achieving 80% size reduction and 2.5x performance gains through optimization and memory-efficient design
- Implemented CI/CD pipelines with Gitlab Pipelines and AWS CodeDeploy, reducing deployment time by 4hrs and improving reliability.

Software Engineer | THE AI TEAM PVT. LTD.

Dec 2021 – June 2024 | Contract | Colombo, Sri Lanka

- Wrote modern, performant, maintainable code for a diverse array of client and internal projects utilizing Angular, React, NodeJS, Flask & various other technologies
- Contributed to the fork of the open source pdf generation library ReactPdf and to the type racing platform Razor
- Mentored and guided an intern through completing a project, overseeing its planning, execution, and completion.
- Collaborated on the enhancement of a SaaS product for a client, optimizing its performance and efficiency through implementing web workers and algorithmic improvements.

ML Research Intern | UCSC - COGNITIVE SCIENCE & TIME SERIES LAB

Nov 2022 – May 2023 | Full Time | University of Colombo School of Computing, Sri Lanka

- Researched on time series modelling and anomaly detection domain
- Improved my academic reading, writing and analytical skills through literature reviews and workshops.
- Worked with various machine learning and deep learning tools and frameworks including TensorFlow, scikit-learn, pandas, numpy and matplotlib

Software Developer - Intern | NAWALOKA HOSPITALS PLC

April 2019 – March 2020 | Full Time | Colombo 2, Sri Lanka

- Developed and deployed a PWA using Angular, Node.js, and MongoDB for the patient triage process, facilitating the daily assessment of ~150 patients.
- Worked on the modernization of legacy Hospital Information System which is built with JavaEE, Oracle DB.
- Automated transfer of employee time sheets from the biometric devices to the HRMS. Which eliminated conflicts and reduced the synchronization time from ~4 hours to 5 minutes.
- Provided support in network/server deployments and other sys. admin tasks

EDUCATION

Bachelor of Science Honours in Computer Science GPA: 3.82 / 4.0

UNIVERSITY OF COLOMBO

Post Graduate Diploma in IT

BRITISH COMPUTER SOCIETY

G.C.E. Advanced Level Z-Score : 1.6301 | Mathematics, Physics & ICT

NALANDA COLLEGE, COLOMBO

SKILLS

Programming

Experienced: Typescript • JavaScript Python • SQL • C/C++ • Java

Familiar: PHP • Go • Rust • Kotlin

Libraries & Frameworks

Experienced: ReactJS • Angular • NestJS • NextJS • ExpressJS • SASS

Familiar: Spring Boot • Hibernate • Flask • React Native • ThreeJS • OpenCV • VueJs • TensorFlow • Bootstrap • Tailwind • Material UI • SocketIO • Jekyll Compose

Tools & Platforms

Git • Linux • Docker • GCP • AWS • Electron • Firebase • MongoDB • PostgreSQL • MySQL • GraphQL • Vercel

CERTIFICATIONS

Continuous Delivery & DevOps Credential : [KAC9T8NMF2VJ](#)

COURSERA - JUN 2021

Azure Fundamentals - AZ-900 Credential : [Verify](#)

MICROSOFT - MAY 2021

PROJECTS

Heart Murmur Detection in PGCs | TENSERFLOW, LIBROSA, DEEP LEARNING

2023-2024 - Undergrad Research

- Reconstruction-based approaches for detecting heart murmurs using hybrid deep learning models

Lumen | NODEJS, REACT, POSTGRESQL, ELECTRON, AZURE

2022 - Source : [/lumenplatform/lumen](https://lumenplatform.com/lumen)

- Lumen is a secure course delivery platform built to protect the intellectual works of online course providers/tutors.
- Utilizes DRM technologies like Widevine, and PlayReady through Azure Media Services.
- Advanced protection measures implemented through a desktop application.

DocPad | NESTJS, ANGULAR, MONGODB, JAVAEE, GRAPHQL

2019 - Freelance Project

- Digital prescription writing platform with customizable prescription templates which integrate with existing systems to aggregate patient information.

Other Notable Projects: [NastyPigs](#) • [Helix CSS](#) • [Distributed Shop](#)