

Vilakshan Vinasirajan

+94 77 378 52 63

vilakshan2996@gmail.com

Colombo, Sri Lanka

vilakshan29.me

in vilakshan-vinasirajan

vilakshan2996

Skills

Programming Languages: Python, Java, Dart, C, Node.js

Databases: MySQL, MongoDB, ChromaDB

Frameworks and Platforms: Spring Boot, Flutter, Firebase, Firestore

Infrastructure & Cloud: Docker, Terraform, Kubernetes, AWS Services [Completed [Solutions Architect](#) Knowledge Badge Assessment from **AWS**], Google Cloud Function, Terraform

Monitoring and Performance: Datadog, JMeter

Other: Playwright, Langchain, Linux, Spring Security, PyTorch

Experience

GTN, Software Engineer,

Remote, Part-Time, Dec 2023 - Feb 2024

- Developed an endpoint for fetching Shariah compliance symbols in the backend application and fixed reported bugs on the developed endpoints. .
- Instrumented dd-trace-js on top of our backend application to obtain observability data.
- Created a Datadog dashboard and configured a pipeline to display test case results on each environment.
- Raised an issue regarding a bug in [dd-trace-js](#).

GTN, Software Engineer Intern

On-site, Full-time, July 2023 - Dec 2023

- Led the transition from a monolithic structure to a microservice architecture within the API team.
- Conducted a thorough evaluation of different AWS solutions for microservices.
- Created and managed a **Kubernetes** cluster.
- Implemented microservice-supported API architecture using various AWS services: AWS Load Balancer, API Gateway, Target Groups, Lambda functions, CloudWatch. You can view the detailed solution architecture [here](#).
- Developed Terraform scripts for infrastructure provisioning.
- Implemented enhancements to our scripts using the AWS-managed **terraform-aws-eks-blueprints-addons**. Also, contributed to the repository, which can be viewed at this [link](#).
- Collaborated with colleagues on continuous performance testing using **JMeter**.
- Designed and implemented a pipeline script for end-to-end automation, including building application artifacts and deploying them to the **Amazon Elastic Container Registry (ECR)**.
- Integrated **Datadog** for comprehensive visualization of the entire cluster and resource utilization of applications.
- Conducted logs analysis at the load balancer and gateway levels.

Education

BSc University of Peradeniya, Computer Engineering










Dec. 2019 to Present

- GPA: 3.8/4.0
- Coursework:** OOP, Data Structure & Algorithm, Machine Learning, Software Engineering, Database Systems, Operating System, Networking, Embedded System

Dip in Management Accounting - CIMA

2019

Projects

Defect Detection System for Specific Toy Faces  - [PyTorch, Conda, Python, Tunneling]	2024 - Current
<ul style="list-style-type: none">Implemented and fine-tuned the PADIM model using defect-free data from the MVTecAD Dataset, focusing on segmentation techniques to enhance accuracy and reduce inference time.	
Trading Bot Admin Dashboard  - [Flutter, Firestore, Cloud functions, Lambda functions, Binance API]	2024 - Current
<ul style="list-style-type: none">Developed a trading bot performance dashboard for investors and administrators.Enabled monitoring of real-time PnL, asset changes, trades executed, and cumulative PnL.Utilized GetX for state management, implemented MVC pattern, Integrated serverless back-end functions for efficient data handling.	
Pegas: Smart Gas Monitoring System   - [Flutter, Firebase, Embedded System, C]	2023
<ul style="list-style-type: none">Monitors gas levels and detects gas leaks using sensors.App allows users to monitor gas levels and receive alerts for gas leaks .	
GTN WISE BOT  - [Python, Streamlit, Langchain, ChromaDB, AWS]	2023
<ul style="list-style-type: none">a chatbot integrated with AI to provide smart responses from a comprehensive dataset.the development of seven specialized chatbots, each tailored for different functions ranging from application support to DevOps supports within company.	
Real-Time Remote Monitoring System   - [Arduino, Flutter web, MQTT, C]	2022
<ul style="list-style-type: none">Captures real-time video from an onion storage and seamlessly displays it to the user through a dashboard app.	
WSAP - Tool Kit for WhatsApp  - [Flutter, Firebase]	2021
<ul style="list-style-type: none">Enables users to create and share polls, save WhatsApp statuses, and split videos for direct status sharing.Have 500+ downloads on Google Play.	
Sri Lankan Shipping Rate  - [Flutter Web, Firebase, Google Search Console, WordPress]	2023
<ul style="list-style-type: none">Assist direct shipping businesses in calculating shipping rates.Have 1000+ impressions .	
GOOGLE SCHOLAR WEB SCRAPE BOT - [Python, Selenium]	2023
<ul style="list-style-type: none">Obtain the usernames, citation counts, and links to the Google Scholar profiles of university staff members.	
Lankan Assist : An app for All SriLankan - [Flutter, Firebase]	2023
<ul style="list-style-type: none">Offers a diverse range of functionalities including real-time Sri Lankan news sourced from Twitter, railway schedule information, and various other features.Have 1000+ downloads on Google Play.	

Achievements

GTN AIVOLUTION: Won 2nd runner up for the GTN WiseBot

ACES HACKATHON : Title winners under Sustainable category | Demonstrated Smart Green House Project.

ACES CODERS V 9.0 : National-wide problem-solving hackathon | 26th place out of 100 Teams.

References

Roshan G. Ragel BSc-Eng, PhD ,Professor and Head Computer Engineering, University of Peradeniya

Jaminda Batuwangala, Head of Engineering, FinTech Integrations, GTN