Vilakshan Vinasirajan

**** +94 77 378 52 63

☑ vilakshan2996@gmail.com

• Colombo, Sri Lanka

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 Computer Engineering, University of Peradeniya

• 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

Dec. 2019 to Present

Projects .

Defect Detection System for Specific Toy Faces • [PyTorch, Conda, Python, Tunneling] 2024 - Current · 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, Bi-2024 - Current nance API1 • 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 backend functions for efficient data handling. **Pegas: Smart Gas Monitoring System ()** • [Flutter, Firebase, Embedded System, C] 2023 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 • 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 Captures real-time video from an onion storage and seamlessly displays it to the user through a dashboard app. **WSAP - Tool Kit for WhatsApp O** - [Flutter, Firebase] 2021 • 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 9** - [Flutter Web, Firebase, Google Search Console, WordPress] 2023 Assist direct shipping businesses in calculating shipping rates. • Have 1000+ impressions. **GOOGLE SCHOLOR WEB SCRAPE BOT** - [Python, Selenium] 2023 • 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 · Offers a diverse range of functionalities including real-time Sri Lankan news sourced from Twitter, railway schedule information, and various other features.

Achievements ____

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

• Have 1000+ downloads on Google Play.

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