VIRIYADHIKA PUTRA

Email: viriya.dhika0@gmail.com | Site: https://viriyadhika.com

WORK EXPERIENCES

GIC Pte. Ltd. - Data Engineer   Aug 24 to Present

Tech Stack: Java Spring Boot, PostgreSQL, Kubernetes, OpenShift, AWS, Python, FastAPI, Linux/Bash

- Built ETL pipelines and CI/CD deployment scripts to centralize company-wide financial instruments database using Amazon Web Services and Java Spring Boot, deployed in Kubernetes.
- Created a highly concurrent Python API for data reconciliation to maintain data quality within the pipeline.
- Developed a Python tool to parse requirement specifications and automate code generation.

TikTok Pte. Ltd. - Frontend Engineer   Jul 23 to Aug 24

Tech Stack: JavaScript, Typescript, ReactJS, Redux, Internal tools – CDN, Load Balancer

- Created a React webpage within the TikTok App, enabling creators to track their TikTok Shop affiliate performance, accessed by millions of monthly active users.
- Designed and implemented new data dashboards in shop.tiktok.com, partner.tiktokshop.com, and affiliate.tiktok.com. Integrated content diagnostic features in the TikTok Shop seller app by providing creators with content inspiration.
- As the front-end in charge for partner.tiktokshop.com data dashboard, reviewed pull requests, enabled greyscale release through CI/CD script, and addressed periodic user feedback, achieving high user growth in new markets.
- Leveraged internal build tools and infrastructure to support multi-region deployments. Utilized front-end data collection frameworks and Apache Hive interface to develop production monitoring dashboards.

DBS Bank - Full Stack Developer   Jul 21 to Jul 23

Backend: Java Spring Boot, Cassandra DB, MariaDB, SQL, Camunda, RabbitMQ, JUnit, Kibana

Frontend: ReactJS and hooks, Redux toolkit + Redux-saga, Typescript, Jest, React-testing-library

- Leveraged Camunda with Java Spring Boot to orchestrate workflows and manage subsystem API calls in a nationwide branch banking system designed for bank tellers and managers.
- Integrated the Teller Assist Unit physical device with the application, using REST API to trigger device actions, RabbitMQ and WebSocket for real-time event communication.
- Advocated for reusable front-end components by gathering cross-team requirements and maintaining widely used components, reducing development time for common components from one week to one day.
- Built testable front-end code using Jest and React Testing Library and back-end code with JUnit and Mockito, achieving 98% unit test line coverage as measured by SonarQube static code analysis.

EDUCATION AND ACADEMIC AWARDS

National University of Singapore   Aug 16 to May 20

- Bachelor of Material Science Engineering - GPA: 4.77 / 5 (First Class Honours)

Part-time Courses (National University of Singapore)   Sep 21 to May 24

- IT5002 - Computer Systems and Applications, IT5003 - Data Structure and Algorithm
- Executive Certificate in Data Mining and Machine Learning: Decision Tree, Support Vector Machine in R. Convolutional Neural Network (CNN) in TensorFlow.

Publication   Aug 19 to May 20
Link: https://iopscience.iop.org/article/10.1088/1361-6463/ac09b6

- As a part of a final year project, co-authored the journal article titled "Intermixing induced anisotropy variations in CoB-based chiral multilayer films" published in the Journal of Physics D.
- Developed a Python script with pandas and matplotlib to automate the calculation of effective magnetic anisotropy (K_{eff}) from Alternating Gradient Magnetometer data.

Academic Awards

- Material Research Society Singapore Medal 2020 for the best final year project out of 60 projects.
- Dean's List (top 5% of students) during Semester 1 of 2017/2018 and Semester 2 of 2018/2019.
- ASEAN Scholarship: a full scholarship with a stipend to pursue undergraduate studies.