# Kethaka J. Ranasinghe

# Associate Software Engineer | Undergraduate

Phone: +94 774477984 Portfolio: <u>Kethaka J. Ranasinghe</u>
Email: kethakaranasinghe984@gmail.com
Address: 277/A, Nedagamuwa, Kotugoda
GitHub: <u>Kethaka J. Ranasinghe</u>

#### **ABOUT ME**

Full-Stack Java Developer with expertise in Angular, Spring Boot, and PHP, complemented by strong DevOps capabilities (Docker, Kubernetes, AWS CI/CD). Experienced in AI development with OpenCV, MediaPipe, and Keras, alongside data science skills using Streamlit, NumPy, Pandas, and scikit-learn. Focused on delivering scalable, high-performance applications through clean code and thoughtful architecture to solve complex business challenges.

#### PROFESSIONAL EXPERIENCE

# Kapruka Holdings PLC

• Associate Software Engineer | March 2024 - May 2025

Intern Software Engineer | September 2023 - March 2024

#### **PROJECTS**

# Kapruka Partner Central. (Spring Boot, Angular, MySQL)

Seller central platform. It connects sellers to the Kapruka.com marketplace backend.

- Lead a team of developers in the development of monolithic architecture.
- Reviews code written by team members and serves as mentor on architecture and new technologies
- Played a key role in troubleshooting and resolving backend issues
- Developed the product module, shipment module, order module, user module, dashboard and admin module with JWT authentication.
- Developed the middleware for the sales and purchase invoices hit to ERPNext open source cloud ERP.
- Collaborated with cross-functional teams, including frontend developers and QA engineers, to deliver a seamless user experience and defect resolution.
- Participated in Agile/Scrum development processes, including daily stand-ups, and retrospectives.

# Machine Learning Projects.

- Developed a unified Streamlit web app featuring 5 key machine learning projects.
- Implemented
  - Housing Price Predictor using multiple linear regression and one-hot encoding.
  - Iris Flower Classifier using logistic regression (multiclass) and feature scaling.
  - Customer Segmentation using K-Means clustering with PCA visualization.
  - Email Spam Classifier using binary logistic regression and TF-IDF vectorization.
  - Movie Review Sentiment Analyzer using multiple classifiers (SVM, Random Forest, Logistic Regression) with GridSearchCV tuning.
- Applied core ML techniques: regression, classification, clustering, regularization, cross-validation, and dimensionality reduction.
- Used Pipeline, StandardScaler, TfidfVectorizer, and GridSearchCV to streamline and optimize models.
- · Saved trained models using joblib and deployed the application with Streamlit for interactive usage.
  - URL: <u>ai-demo-application.streamlit.app</u>

# Sampath Pos System. (Python, SQLite)

A CLI application for,

- Manages daily sales transactions, Supports multiple branch management, Tracks branch-wise sales performance, Maintains product activity logs, Generates and downloads sales reports.
- Uses a repository pattern for database queries.
- · Implemented a test\_db\_connection class for database testing.

#### **AWS CI/CD Demo Project**

- Designed and implemented a full CI/CD pipeline for a Flask web application using AWS services and Docker.
- Containerized the application using Docker and managed multi-container setups with Docker Compose.
- Built and deployed Docker images automatically using AWS CodeBuild and AWS CodePipeline.
  - URL: <a href="http://107.20.77.223:5000">http://107.20.77.223:5000</a>

# GoMart Inventory System. (Spring Boot, Angular, MySQL)

Enabling customer product purchases, with admin privileges for managing products, users, and sales.

# Social Sphere Management System. (Spring Boot, React, MySQL)

A social media platform enabling users to create, like, and manage posts, with admin controls for managing users and content.

# CityCycle Mobile App for Bike Rental System. (React Native, Firebase)

Application is able to manage Rentals, User Management.

#### Mobile App for Bike Rental System. (Android, Java, SQLite)

Application is able to manage Rentals, User Management.

#### **EDUCATION**

# Colombo International Nautical and Engineering College | Undergraduate

• Bachelor of Science (Hons) in Computer Science (Top-Up Degree)

# Sri Lanka Institute of Advanced Technological Education | 2021-2023

• HND in Information Technology. | GPA: 3.63

St, Peter's College Colombo-04 Gampaha Branch.

#### TECHNOLOGICAL EXPERIENCE

# **Programing Languages**

• Java, C++, Python, PHP, Visual Basic, Android

#### Frameworks & Libraries

• Backend: Spring Boot, Flask, Codelgniter

Frontend: Angular, React, Bootstrap

Mobile: Android(Java), React Native

AI/ML: OpenCV, MediaPipe

• Data Science: NumPy, Pandas, Matplotlib, scikit-learn, Streamlit

#### Web Development

• HTML, CSS, JavaScript

# DevOps & Cloud

Docker, Kubernetes, AWS CI/CD pipelines

#### **EXPERTISE**

- Team leadership.
- Application design and development.
- · Critical Thinking.
- · Problem Solving.
- Time Management.
- · Fast Learning.

#### **NON-RELATED REFERENCES**

 Mrs. Gayathri Banneheka Head of IT Department Kapruka (pvt) Ltd 0703517486  Mr. S. Rajesh Kanna, Vino Trading (pvt) Ltd, Company Director. 0714727427