# Sanjay Kanna S

sanjaykanna92@gmail.com | 6383056231 | LinkedIn | Chennai | Portfolio | GitHub

#### **CAREER SUMMARY**

Experienced Full Stack Java Developer with expertise in building end-to-end web applications and enterprise-level software solutions. Proficient in both frontend and backend technologies, including Java, Spring, Hibernate, JavaScript, HTML, CSS, and modern JavaScript frameworks such as React and Angular. Strong background in RESTful API development, database management (SQL and NoSQL), and cloud integration. Adept at solving complex problems, optimizing system performance, and delivering scalable, high-quality applications. Ready to contribute technical expertise to innovative software development teams.

### **EDUCATION**

Kings Engineering College, Anna University (2020 – 2024)

Bachelor of Engineering - Computer Science and Engineering - CGPA: 7.20

Jaya Jaya Sankara International School (2019 – 2020)

Higher Secondary Certificate (State Board) - Percentage: 60%

Jaya Jaya Sankara International School (2017 – 2018)

Secondary School Leaving Certificate (CBSE) - Percentage: 80 %

#### **EXPERIENCE**

### Shiash Info Solutions Private Limited, Chennai – Trainee (June 2024 – July 2024)

- Developed and maintained Java-based applications using Spring Boot and Hibernate, focusing on enhancing application performance and scalability. Collaborated closely with senior developers, contributing to the optimization of application architecture, resulting in a 15% performance improvement.
- Managed database models using MySQL and PostgreSQL, optimizing query performance for large datasets by implementing stored procedures and efficient indexing. Reduced query execution time by 30%, improving overall system responsiveness.
- Debugged and troubleshooted application issues using tools like JIRA and Eclipse IDE. Identified bottlenecks and worked to
  resolve them in collaboration with the QA and DevOps teams, which resulted in a 50% reduction in downtime and improved overall
  system stability.

#### **PROJECT**

#### • Web-Based Application for House Hold Scrap Selling Service. (Full Stack Developer)

- **Description: Developed a full-stack web-based application** using **Python** to streamline the process of buying and selling household scrap materials, enabling efficient interaction between users and vendors.
- Frontend: Designed a responsive and user-friendly interface using HTML5, CSS3, and JavaScript. Integrated forms for user registration, scrap item submissions, and vendor requests, ensuring seamless interaction across devices.
- **Backend:** Built the backend using **Python** with the Flask framework to handle server-side logic, including data processing, user authentication, and communication between buyers and sellers through **RESTful APIs**.
- ➤ **Database Management**: Utilized **SQLite/MySQL** to store and manage user data, scrap item listings, and transaction histories. Implemented **CRUD operations** (Create, Read, Update, Delete) to efficiently manage the application data.
- Payment Gateway Integration: Integrated third-party payment services PayPal to allow secure online payments between sellers and buyers, ensuring smooth financial transactions.
- > **Testing**: Performed **unit testing** using **PyTest** to ensure the functionality of key modules, while conducting user acceptance testing to meet user requirements.
- > **Impact**: The application promotes environmental responsibility by encouraging recycling and provides users with a practical solution for selling scrap, ultimately contributing to waste reduction.

### • Accident Avoidance System for Drowsiness Detection Using Python. (Developer)

- > Developed an intelligent accident avoidance system to detect and prevent driver drowsiness using Python and computer vision techniques, improving road safety by reducing accidents caused by driver fatigue.
- Facial Recognition and Eye Tracking: Integrated OpenCV and Dlib libraries to track the driver's facial landmarks, focusing on eye movements and blink duration. Implemented algorithms to monitor eye closure and determine signs of drowsiness.
- ➤ Real-Time Drowsiness Detection: Built a real-time alert system that continuously analyzes the driver's eye movements. When prolonged eye closure or frequent yawning was detected, the system triggered audio and visual alerts to wake the driver.
- ➤ Data Collection and Analysis: Collected data on driver behavior during various driving conditions (day/night, short/long trips) and used Pandas and NumPy for data analysis. Analyzed patterns in drowsy behavior to further fine-tune detection algorithms.
- Alert Mechanism: Programmed the system to trigger immediate audio alarms and vibrations when drowsiness was detected, ensuring the driver's immediate response. The system also recorded instances of drowsiness for further review.
- > Outcome: The system successfully detected driver drowsiness with an 85% accuracy and significantly improved road safety by reducing potential accident risks due to fatigue.
- > Impact: This project aims to enhance road safety by reducing the risk of accidents caused by driver fatigue, contributing to safer driving practices and overall public safety.

### **SKILLS**

- Programming Languages: Java (Intermediate), Python (Intermediate), JavaScript (Intermediate), and HTML/CSS (Advanced).
- Full-stack Development: Frontend (React, HTML, CSS, JavaScript), Backend (Java, Python).
- **Database:** MySQL (Intermediate).

## **CERTIFICATIONS**

- Programming in Core Java by Accord info Matrix
- Programming in Python by Guvi
- JavaScript course at Accord InfoMatrix
- HTML & CSS course at Accord Info Matrix.
- Development for enterprise DevOps by Guvi.
- MySQL course at Accord Info Matrix

### **LANGUAGES**

- English. (Fluent)
- Tamil. (Native)