

SAM CHRISTOPHER K

EXPERIENCE SUMMARY

Experience Level: 2 Months

Now: Mirafra Software Technologies Private Limited, APRIL 2025 - Present

Past:

- Besant Technologies, JULY 2024 - JAN 2025

Education:

- Bachelor of Engineering (B.E.), Computer Science & Engineering, C. Abdul Hakeem College of Engineering and Technology, Graduated: 2024, CGPA: 8.3

Technical Skills:

- Programming Languages: **Python, JavaScript**
- Frontend: HTML5, CSS3, JavaScript, **React, Vue.js**
- Backend: **Node.js, NestJS**, RESTful APIs, JWT Authentication, Microservices, MVC Architecture
- Databases: MongoDB, MySQL
- Version Control: Git, GitHub
- Operating Systems: Windows
- Tools: VS Code, Postman, PyCharm

PROJECT EXPERIENCE

Company Name: Mirafra Software Technologies Private Limited

Project: SwiftKart – E-Commerce Web Application

Role: Software Engineer I

Description:

Developed SwiftKart, a scalable and feature-rich e-commerce web application following **Microservices Architecture** and the **MVC Design Pattern**. The platform provides users with a seamless shopping experience through a modular, maintainable, and responsive system. Core features include user authentication, product browsing, secure payment integration, and order management.

Tech Stack:

HTML5, CSS3, JavaScript, **React.js, Vue.js**, TypeScript, **NestJS**, MongoDB, Tailwind CSS

Key Features & Implementation:

- **Admin Dashboard (Vue.js):** Interface for admins to manage users, products, category and transaction, including reporting and analytics.
- **Product Service:** Developed complete CRUD functionality for the product catalog with inventory tracking.
- **Category Service:** Independent service to manage product categories, enabling category-wise filtering and product organization.
- **Transaction Service:** Stored and managed payment transaction details, including transaction status and metadata.
- **User Service:** Implemented JWT-based authentication with role-based access control (Admin, Buyer).
- **Frontend:** Built with React.js, TypeScript, and Tailwind CSS, using Redux Toolkit for global state management.
- **State Management:** Utilized Redux Toolkit in the React frontend and Pinia in the Vue.js admin dashboard for efficient and scalable global state management.

- **UI/UX Enhancements:** Applied Framer Motion for animation effects and skeleton loaders to improve loading experience.
- **Error Handling:** Developed custom 404 and error pages, and used error boundaries for stability.
- **Payment Integration:** Integrated PayPal API for secure transaction processing, with scalability for future providers.

Architecture Overview:

- **Microservices:** Each service (Product, User, Transaction, Category) built using NestJS and backed by its own MongoDB instance.
- **Design Pattern:** Adopted MVC architecture for clean code separation and maintainability.
- **Service Communication:** Utilized the TCP protocol for inter-service communication.
- **Client-Server Communication:** Employed RESTful HTTP APIs for frontend-backend integration.

PERSONAL PROJECTS

Blog Application

- Designed and developed a responsive blog platform with full CRUD functionality allowing users to create, edit, delete, and view blog posts dynamically.
- Implemented a clean and intuitive UI with responsive design for optimal experience across all devices.
- Used JSON Server as a mock backend for simulating real-time data storage and retrieval.

Weather App

- Built a responsive weather application that displays real-time weather data for user-specified locations.
- Integrated REST APIs to fetch live data and dynamically update the UI based on user input.
- Focused on delivering a visually appealing and user-friendly interface across screen sizes.

Languages

- English
- Tamil

Certifications

- The Complete 2023 Web Development Bootcamp - View Credentials
- The Complete Python Bootcamp From Zero to Hero - View Credentials