

# Shivam Singh

Manipal, Udupi, India | +91-98199-09563 | Portfolio | LinkedIn | GitHub

## Education

### B.Tech in Information Technology

Sep 2020 – Present

Manipal Institute of Technology, Manipal CGPA: **7.52**/10

## Technical Skills

**Languages:** Java, C, C++, Python, JavaScript

**Frameworks:** React, Node.js, Express.js, FastAPI, PyTorch

**Web & Databases:** HTML, CSS, Bootstrap, MERN, MySQL, MongoDB, Firebase

**DevOps & Tools:** Git, Docker, VS Code, Postman, AWS

**Other:** Data Structures, Algorithms, OCR/NLP

## Experience

### Tech Executive Intern

May 2024 – Jul 2024

Happy Soul (E-commerce Startup), Mumbai

- Maintained MERN-stack site for **1000+ monthly users** with **99.9% uptime**
- Integrated Razorpay payments & Shiprocket logistics APIs, reducing manual work by **40%**
- Collaborated with QA and product teams to reduce bug resolution time

## Technical Projects

### Dynamic Crop Recommendation & Profit Estimation

Individual Project, 2025

**Tech:** Python, PyTorch, FastAPI ([GitHub Link](#))

- Deployed PyTorch MLP via FastAPI achieving **85.2% accuracy** on **15,000 samples**
- Employed Monte Carlo dropout reducing misclassifications by **25%**
- Built a profit-simulation engine forecasting within **±450 INR/ha** over 5-year data

### Chat Application with AI Integrations

College Project, 2025

**Tech:** Android Studio (Kotlin), Firebase, TensorFlow Lite, OpenAI API ([GitHub Link](#))

- Developed real-time messaging app using Firebase Authentication, Firestore, and FCM
- Integrated AI features: GPT-powered Quick Chat and on-device sentiment analysis
- Implemented AES-GCM encryption with Diffie-Hellman key exchange, sub-**200ms latency**

### RedactPro – AI Data Redaction

Individual Project, 2024

**Tech:** React, Python, Node.js/Express, Docker, TensorFlow ([GitHub Link](#))

- Developed OCR/NLP pipeline redacting sensitive data with **95% accuracy**
- Created React UI with real-time feedback; processed **500+ files** in pilot
- Containerized backend using Docker for scalable deployment

### Embedded Ultrasonic Sensor System

College Project, 2023

**Tech:** LPC1768 MCU (C), HC-SR04 Sensor, Stepper Motor ([GitHub Link](#))

- Programmed MCU for stepper-driven ultrasonic scanning with LCD display
- Added keyboard controls improving scan speed and simplifying input

### MindfulSurf – Chrome Extension

Hackathon, 2023

**Tech:** JavaScript, HTML/CSS, D3.js, Chrome APIs ([GitHub Link](#))

- Utilized Chrome WebNavigation, Tabs, and Idle APIs to track active browsing time and idle intervals; stored data locally via `chrome.storage.local`
- Implemented per-site and global daily time budgets; automatically redirected to a customizable block page when limits were exceeded
- Built D3.js-based charts (daily/weekly usage) in popup and options pages, including a heatmap of most-visited sites