# HARSHIT TYAGI

GitHub @Portfolio inLinkedIn Mtharshit03@gmail.com &LeetCode >GeeksForGeeks

## Education

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, NOIDA SEC-62

June 2026 (expected)

B.TECH in Computer Science Engineering

CGPA: 7.3

# Relevant Coursework

Data Structures and Algorithms, Object-Oriented Programming, Database Management Systems, Operating Systems, Computer Networks, Software Engineering

## Technical Skills

Languages: C/C++, Python, HTML, CSS, JavaScript, PHP, SQL, Bash

Web Development: Flask, React.js, Node.js, Express.js, MongoDB, Firebase, PostgreSQL, MySQL Cloud & DevOps: AWS (EC2, IAM, Lambda, Cognito), IaC, Terraform, CI/CD, GitHub Actions,

NGINX, Docker, Kubernetes, Prometheus, Grafana

AI/ML: Pandas, NumPy, Scikit-learn, TensorFlow, Matplotlib, Seaborn

# Experience

### Smart Production Monitoring & Forecasting System - Moon Beverages Ltd.

June 2025 - Present

- · React.js · Flask · Python · AWS · Docker · ML/DL
- Contributed to a full-stack prototype with a React dashboard and Flask APIs, containerized with Docker and deployed on AWS EC2 enabling category-wise product analysis.
- Co-developed demand forecasting endpoints using pre-built ML (Random Forest) and DL (LSTM) models via Flask API with TensorFlow, enabling data-driven insights to support inventory planning.

# **Projects**

# eBilling System - Inventory & Billing Management

**⊘**GitHub

- Developed a desktop-based inventory and billing system using Python, Tkinter, and MySQL, enabling customer management, product tracking, and automated billing with PDF generation.
- Designed and implemented a normalized MySQL database schema to store transactions, inventory, and customer data, supporting real-time updates and SQL-based analytics.

#### **Weather Forecast App**

**⊘**GitHub

- Built a full-stack weather forecasting web app using React, Chart.js, and Express, integrating the VisualCrossing API for real-time weather data.
- Implemented features like dark mode, 7-day trend visualization, and responsive UI to deliver a modern, user-friendly experience across devices.

### TrackSphere: Web Activity Analytics via a Secure Chrome Extension Pipeline

**∂**GitHub

- Engineered a cloud-native architecture using Dockerized microservices (Kafka, PostgreSQL, Node.js, Grafana, NGINX) on AWS EC2, secured with SSL and mapped to a custom domain.
- Configured a Chrome extension to capture user activity and enable Kafka-based stream processing, with real-time storage in PostgreSQL and visualization through Grafana.

#### E-Market - Shopping Management System

**⊘**GitHub

- Developed an interactive C++ console application for managing user authentication, product browsing, cart operations, and billing in a simulated shopping system.
- Implemented features like discount logic, file-based data storage, and payment processing using objectoriented design and standard C++ libraries.

# Certifications & Extracurricular Activities

- Web Development Bootcamp Udemy: Completed MERN full-stack course.
- AI Skill Camp Intel Digital Readiness: Gained hands-on exposure to AI/ML concepts and use cases.
- NSS Volunteer Participated in various community service events held in college, offering dedicated event support and assistance to community initiatives.
- College Volleyball Club Participated in sports team, cultivated discipline, physical endurance, and a collaborative mindset.