







# HARSHIT TYAGI

 [GitHub](#)  [Portfolio](#)  [LinkedIn](#)  [tharshit03@gmail.com](mailto:tharshit03@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 (classification, regression), TensorFlow (ANN), Matplotlib, Seaborn

## Experience


**Smart Production Monitoring & Forecasting System – Moon Beverages Ltd.** June 2025 - July 2025  
React.js · Node.js · Python · MongoDB · AWS · Docker · ML

- Built and deployed a real-time production monitoring dashboard on AWS EC2 using Docker, improved operational visibility by 80% and reduced manual reporting time by 60%.
- Developed and containerized ML models for forecasting stock levels and predictive maintenance; deployed via Flask API on cloud, achieving over 85% accuracy and reducing machine failures by 30%.


## Projects

**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.

**EventVerse: Serverless Chat App**  [GitHub](#)

- Co-developed a real-time chat app using AWS Amplify, WebSockets, React.js, and AWS Lambda, enabling seamless, low-latency communication for college societies.
- Implemented AWS API Gateway for WebSockets, DynamoDB for message storage, and Cognito for secure authentication, ensuring scalability and real-time reliability.

**System Resource Monitor**  [GitHub](#)

- Provisioned cloud infrastructure using Terraform and orchestrated a Docker-based monitoring stack (Prometheus, Grafana, Node Exporter) for live system metrics on AWS EC2.
- Automated deployments using GitHub Actions, enabling seamless delivery of infrastructure and observability services through a production-style CI/CD pipeline.

**NeuroWell: AI-Driven Mental Health Analysis Tool**  [GitHub](#)

- Built and trained a Deep Learning (ANN) model using Python, TensorFlow, Pandas, and NumPy for stress level prediction, achieving over 85% accuracy through optimized hyperparameters and data preprocessing.
- Programmed a Flask-based API to integrate the model with a React.js frontend, enabling real-time user interaction and personalized mental health insights.

## 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.