

Parth Maheshwari

+917300044740 | parthmaheshwari4384@gmail.com | [linkedin](#) | [github](#)

TECHNICAL SKILLS

Languages: Python, C++, C, R, Java, JavaScript, SQL, Embedded C
Machine Learning Libraries: Keras, scikit-learn, TensorFlow, Pandas, NumPy, YOLOv8, OpenCV
Frontend Technologies: HTML, CSS, Shiny
Backend Technology: Google Cloud Firebase, REST APIs

EXPERIENCE

Backend Intern

May 2025 - July 2025

Treebo

Bengaluru

- Worked within Hotel Superhero, Treebo's SaaS platform, contributing to scalable backend systems using Flask, SQLAlchemy, and AWS Secrets Manager.
- Refactored an async reporting system in the Accounts Receivable module to generate standardized filenames for debtor-facing reports, improving clarity and traceability.
- Built high-performance bulk APIs for wake-up calls and DND status to reduce latency caused by parallel room-level API calls.

PROJECTS

Smart Traffic Signal Control System

January 2025 - April 2025

Technologies: ESP32-CAM, YOLOv8, OpenCV, Python, Arduino IDE, Hugging Face API

- Designed and implemented an IoT-based traffic control system that uses real-time video from ESP32-CAM to detect vehicle density using YOLOv8, achieving 92% detection accuracy.
- Processed traffic data with Python and OpenCV to dynamically adjust green light durations via ESP32 microcontroller.
- Integrated LCD display and web interface to visualize signal status and countdown timers.
- Improved traffic flow responsiveness and demonstrated scalability for smart city deployment.

Weather Analysis & Forecasting Shiny App

January 2025 - March 2025

Technologies: R, Shiny, ggplot2, Plotly, OpenWeatherMap API, AI Models

- Built an interactive Shiny web application for historical weather data analysis and short-term forecasting.
- Implemented dynamic visualizations for temperature, rainfall, and wind speed using ggplot2 and Plotly, enabling intuitive data exploration.
- Integrated AI-driven models to generate weather insights, risk assessments (e.g., storms, heatwaves), and personalized recommendations.
- Connected real-time weather APIs to fetch current conditions and forecast up to 3 days ahead, enhancing the app's practical utility.

Bingeflix - Movie & Web Series Streaming Platform

February 2024 - May 2024

Technologies: HTML, CSS, JavaScript, Firebase, Streaming APIs

- Developed a full-featured streaming website supporting 500+ movie & series entries, built with vanilla HTML, CSS, and JavaScript.
- Integrated Google Firebase for real-time database management, user authentication, and content synchronization.
- Utilized third-party APIs to fetch and stream a wide range of media content dynamically.
- Integrated a "Watch Party" feature enabling synchronized playback and shared viewing experiences with friends and family using APIs.

EDUCATION

B.Tech in Computer Science and Engineering

2022 - Present

Vellore Institute of Technology

Vellore, India

- CGPA: 8.61

Senior Secondary (XII), Science

2019 - 2021

Neerja Modi School

Jaipur, India

- Percentage: 90%

CERTIFICATES

Flipkart GRiD 7.0

Semi-Finalist

Flipkart, August 2025

OCI 2025 Certified Generative AI Professional

Oracle, July 2025

OCI 2025 Certified AI Foundations Associate

Oracle, June 2025