Bestha Roopesh Sai

Profile

Enthusiastic and dedicated B.Tech 3rd-year student with a strong foundation in machine learning and data analysis. Actively developing a real-time emotion detection application using TensorFlow and Flask. Previous experience as a web development intern at Mafkin Robotics, passionate about leveraging cutting-edge technologies to solve real-world problems, and eager to contribute as an ML intern.

EDUCATION

Vellore Institue of Technology, Chennai

Chennai, TN

Bachelor of Technology in Computer Science and Engineering; CGPA: 8.2

Expected Jul 2026

• Relevant Coursework: Operating Systems, Data Structures & Algorithms, Database Management Systems, Embedded Systems, Artificial Intelligence & Machine Learning

Narayana Jr college

Class 12th: 86.8%, Class 10th: 100.0%

Vijayawada, AP 2022. 2020

SKILLS

Languages: C, C++, Python, Java, Javascript Web Technologies: HTML/CSS, React, Flask

Database: MySQL

Developer Tools: Git, GitHub, Robot Framework **AI/ML**: Deep Learning, Neural Networks, TensorFlow

Interests: Current Affairs, AI, History, Staying updated with latest innovations in Tech

Professional Experience

Software Engineering Intern

Specto V

July 2024 - Present

- Worked on advanced machine learning and data structures and algorithms (DSA) projects.
- Applied DSA to enhance software performance and efficiency.
- Collaborated with senior engineers to integrate AI and DSA techniques into VR solutions.
- Participated in code reviews, debugging, and performance tuning.
- Contributed to over 30 code reviews, enhancing code efficiency by 25 percent through debugging and performance tuning.

Web Developer Intern

Mafkin Robotics May 2024 - June 2024

- Implemented new features and optimized site performance.
- Managed updates and handled confidential project information.
- Revamped and maintained the company's official website, leading to a 40 percent increase in user traffic and a 25 percent reduction in page load time.
- Integrated new features that boosted site performance, contributing to a 30 percent rise in client satisfaction.

Research Intern

VIT Chennai May 2024 - July 2024

- Conducted research focusing on advanced machine learning techniques.
- Implemented an emotion recognition project using deep learning and TensorFlow.

- Completed a project titled "Automated Weather Classification using Transfer Learning," achieving an accuracy of 92 percent.
- Successfully implemented a deep learning model that processed and classified over 10,000 weather images with a 15 percent improvement in prediction speed.

PROJECTS

Automated Weather Classification Using Transfer Learning

Technologies: Python, TensorFlow, Keras

- Developed a weather classification model utilizing transfer learning techniques, achieving an accuracy improvement of 12 percent compared to traditional models.
- Implemented using TensorFlow and Keras, resulting in a high-performance model with a 30 percent reduction in data requirement.

Facial Analysis using Amazon Rekognition

Technologies: Python, Amazon Rekognition

- Utilized Amazon Rekognition to analyze facial features and emotions from images, achieving a 95 percent accuracy rate in emotion detection.
- Developed a system to detect and classify facial expressions for various applications, improving response time by 20 percent.

Face Emotion Prediction

Technologies: Python, OpenCV, TensorFlow

- Implemented a real-time emotion prediction system using TensorFlow and OpenCV, with an accuracy rate of 92 percent in detecting emotions.
- Achieved accurate emotion detection by leveraging deep learning techniques, reducing false positives by 15 percent.

Railway Management System

Technologies: Python, MySQL, Flask

- Developed a comprehensive railway management system to handle scheduling, ticketing, and real-time updates, increasing operational efficiency by 25 percent.
- Used Python for backend development and MySQL for database management, resulting in a system with a 30 percent faster query response time and improved reliability.

CERTIFICATIONS & ACHIEVEMENTS

•	Externship Certificate	- Developers For Google	Aug~20	024

• Problem Solving - HackerRank June 2024

• Networking Essentials - Cisco Feb 2024

• Spoken Tutorial Advanced C++ Training - IIT Bombay Dec 2022

• Spoken Tutorial Advanced Python Training - IIT Bombay

Dec 2022

EXTRACURRICULARS

Technical Team Member - ResourceX Club (VIT Chennai)

Jul - Sept 2023

* Contributed as part of a team in designing and building the ResourceX Club website from the ground up.