

Manoj Tummala

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EDUCATION

University of Southern California

Masters of Science in Computer Science

Los Angeles, CA

Aug 2023 – Aug 2025

Sathyabama University

Bachelor of Engineering in Computer Science — CGPA 3.84

Published a research paper “LiDAR Sensor For Self Driving Cars” in **ICCES 2023**.

Chennai, TN

Aug 2019 – May 2023

EXPERIENCE

React JS & System Architecture Developer

Zee Media

Noida, IN

May 2022 - Sep 2022

- Developed a nationwide release website from scratch in **React & AngularJS** and **Node & MangoDB**.
- Enhanced website component efficiency, including elastic search, suggestions, and notifications, by **20%** through architecture redefinition.
- Increased task efficiency and automation by working in Jenkins and Git pipelines

React JS Developer

Edfish

TN, IN

Feb 2023 - Jun 2023

- Utilized **ReactJS** to create **70%** of a full-stack website acting as a communication hub among multiple schools
- By leveraging React and optimizing code, achieved a **30%** improvement in code re-usability and enhanced front-end effectiveness.

PROJECTS

Lidar Sensor For Self Driving Car | Python, CPP, MATLAB

- Created a physical model of a self-driving car from scratch by incorporating **LiDAR sensors** rather than a camera.
- Collected real-time data to visualize surroundings of the vehicle and am in process of developing an immersive interface to interact with live surroundings.

Clipy | Python, JAVA

- An application where one can copy on a device and paste it on another, using python, firebase and android. This feature is available on mac but not on other devices, so it can be operated as “**Universal Clipboard**”.

A* Path Finding Algorithm | JavaScript

- Usage of A* Algorithm to find shortest path by itself through a maze. A heuristic way of learning and fun application of algorithms.

Attendance using Face Recognition | Python

- Made it into a working model for university usage along with professors and fellow peers. Leveraging OpenCV for face recognition and identification of a student and marking it into a .csv file.

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, SQL (Postgres), Java, PHP, HTML/CSS, R

Frameworks: React, Node.js, Flask, REST, WordPress, Material-UI, FastAPI

Developer Tools: Git, Docker, AWS, Jenkins, Linux Kernel, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, Matplotlib

ENGAGEMENT, ACHIEVEMENTS & RECOGNITION

- Worked as **Core Technical Lead** at Google Developer Student Club and organized numerous coding events to guide fellow peers and juniors.
- Worked as **Microsoft student ambassador** organizing outreach programs and gatherings with organizations.
- Achieved recognition by advancing to **national level** in the **Smart India Hackathon**, showcasing exceptional problem-solving and teamwork abilities.
- Secured a top **20** position in **Google Solution Challenge** for our team project