Manohar Naga

Education

IIIT Hyderabad Nov 2021 – May 2025

B. Tech in Computer Science Engineering, CGPA: 8.50/10.0

Experience

Game Theory

May 2024 - Jul 2024

Software Engineer Intern

Hyderabad, Telangana

- Built 4+ annotation tools from ground up for object and human tracking, supporting both video and image inputs.
 Achieved 25x reduction in frame load latency (from 5s to 0.2s), a significant performance boost over previous tools.
- Optimized UI for annotation tools, improving workflow efficiency and reducing annotation time by **4x** (from **16 hours to 4 hours** per video(7500+ frames).

Crop Darpan

Jan 2024 – May 2024

BTech Project - Data Sciences and Analytics Center

Hyderabad, Telangana

 Designed and developed a Firebase-based user log storage system, integrated it into the existing app, addressing Expo SDK 48 limitations through dependency resolution and streamlined APK generation, added comprehensive documentation for maintenance.

Teaching Assistant

Jan 2024 – Mar 2024

CS8.301 Introduction to Information Security

• Prepared problem sets, conducted exams, tutorials and office hours for the overall comprehensive learning of the students.

Shadow Media Productions

 $\mathbf{Feb}\ \mathbf{2023}-\mathbf{May}\ \mathbf{2023}$

Full Stack Developer Intern

 $Hyderabad,\ Telangana$

- Developed movies page(both UI and backend), which supports all CRUD operations for a movie.
- Worked with **google firebase** to build high quality movie posters page(15MB+) and authentication page which supports SignIn/SignUp with Gmail/PhoneNo.

Projects

MemeMaker | React-Native, APIs, K8s

 $\underline{\text{Code}}$

• Designed and developed a MemeMaker mobile app, featuring a canvas for users to add/rotate/resize text, integrated Stable Diffusion model API to generate meme images from text input. Currently building a scalable microservice architecture based system with docker and kubernetes.

Greddit | MERN Stack, Firebase, Docker

Code

- Developed a full-stack social media MERN app like Reddit and dockerised it for easy deployment.
- Key features include authentication(Firebase), authorization(JWT), profile and subgreddit pages, post interactions (like,comment), large profile picture uploads (15MB+), user joining requests, admin controls, banned keywords, fuzzy search and more.

DataSphere | BUC, AOI, Apriori

Code

• Developed an OLAP project that extracted interesting datacubes using the BUC algorithm with optimizations (external sorting, hash partitioning, iceberg cubes) and derived characteristic rules through attribute-oriented induction. Developed a Movie recommender system using Apriori Algorithm.

IKIT (Idea Kit) | Webflow, No-Code Tools, Responsive Design

Live Demo

• Built a clean, responsive web app in Webflow using modern No-Code tools to showcase project ideas with dynamic UI and CMS features.

Technical Skills

Languages: C/C++, Python3, HTML/CSS, JavaScript, SQL, Bash

Technologies/Frameworks: React.js, Express.js, Node.js, Next.js, MongoDB, React-Native, Firebase, Git, Github, Docker Fundamentals/Tools: DBMS, Operating Systems, TCP/IP, OOPs, GNU/Linux, Windows

Relevant Coursework

Distributed Systems, Software Systems, Operating Systems, Computer Networks, Computer Systems.

Data Structures, Algorithms, Data Analytics, Probability and Statistics, Linear Algebra.

Achievements

- Progressed to Round 2 in MetaHackerCup2023 Global Rank(2934).
- Achieved 5-star Gold Level in SQL, the highest certification for SQL expertise on HackerRank Profile
- Got Placed in Dean's List, top 10% of our batch for Academic Excellence in Monsoon 2021.