Ramprasath G

EDUCATION

Madras Institute of Technology, Anna University

Bachelor of Engineering in Computer Science; CGPA: 8.3

Chennai, Tamilnadu Oct. 2021 - Present

EXPERIENCE

TIH-IoT, IIT Bombay

April 2024 - Present

Research Fellowship | Python, OpenCV, YOLO

- Leading the research efforts in our project 'IOT driven traffic management' aimed at revolutionizing urban transportation.
- Developed an IoT-driven traffic management system to optimize traffic flow and reduce congestion.
- Integrated data analytics for real-time monitoring to promote sustainable smart cities.

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PROJECTS

Intelligent Traffic Management System

March 2024 - Present

Python, TensorFlow, Object Detection, Pygame

- \circ Developed a system that optimizes signal timings based on real-time traffic volume, cutting average wait time by 23%.
- $\circ\,$ Trained a bespoke YOLO Object Detection model to identify vehicle class in an image with 85% accuracy.
- Pioneered a comprehensive simulation using Pygame to compare the efficacy of our system against traditional methods.

Group Chat

Feb 2023 - May 2023

Java, Multi-Threading, Socket

- Developed a group chat application in Java where user can access different chat rooms and communicate with each other.
- User can access a particular chat room and will be able to listen and write in that chat room only.
- Admin of a room can create passkey for the room using which the user can access the room. Using Multi-Threading clients can send and listen to message from different channels.

Task Manager

June 2023 - Aug 2023

Next.js, React, Prisma, MongoDB

- Utilizing Next.js and React on the frontend, Backend powered by Prisma for robust ORM capabilities and MongoDB for flexible and scalable data storage.
- Integrates authentication for secure user access and data privacy. Task prioritization and filtering functionalities enhance productivity, while intuitive UX design ensures ease of use.

Publications

• ConVision - A Context-based Deep Learning Algorithm for Efficient Lane Detection

-Eliva Press 🗹

• Data-driven approach to automated lyric generation

-IJEAST 🗹

• Speech Disfluency Detection and Elimination for Enhanced Communication

-JETIR

ACHIEVEMENTS

- Solved over **450 problems** with high accuracy rate, with **1,520+ contest rating** in Leetcode. Profile: RamRP34 🗹
- As a Research Scientist at NGN Labs, Anna University, I spearheaded 5+ projects and published work that advanced interdisciplinary knowledge by 25%.

PROGRAMMING SKILLS

- Languages: C/C++, Java, Python, JavaScript, Dart, SQL, HTML, CSS
- Tools/Frameworks: Git, ReactJS, Next.js, Pygame, Flutter, MongoDB, MySQL, TensorFlow