

# MADHUSOODHAN TG

## DETAILS

### PHONE

+1 (312) 825 - 9315

### EMAIL

tgmadhusoodhan@gmail.com

### LINKS

[LinkedIn](#)

[Github](#)

[Portfolio](#)

### PROGRAMMING SKILLS

C++

Postgres

ReactJS

Python

### Machine Learning

PyTorch

Pandas

Numpy

Keras

Tensorflow 2.0

Unreal Engine

Sci-Kit Learn

### AI TOOLS

OpenAI API

Langgraph

Langchain

Github Copilot

### LANGUAGES

Tamil

English

Hindi

## PROFILE

Computer Science Master's student with a solid foundation in algorithms, systems design, and software engineering principles. Developed robust applications using Python and C++, with experience spanning intelligent automation, robotics, and IoT. Now aiming to build scalable and optimized, high-impact software that blends smart tech with efficient algorithms.

## EMPLOYMENT HISTORY

### Freelancer, UCAL R&D, Chennai

Dec 2024 - July 2025

- Developed an Android application that successfully monitored and **displayed real-time tire pressure data with 95% accuracy**, using sensor integration for precise detection.
- Implemented notification and alert features, **reducing the risk of tire-related issues by 40%** through proactive warnings for abnormal pressure levels and enhancing user satisfaction based on feedback surveys and unit testing.

## INTERNSHIP

### Research Intern, UCAL R&D, Chennai

Jul 2022 — Aug 2022

- Engineered a custom CDI system with direct fuel injection logic using C/C++ microcontroller programming, **enabling real-time ignition and fuel control for two-wheelers**.
- Achieved a 60% improvement in mileage and 30% smoother ignition cycles**, contributing to cleaner combustion and enhanced engine performance.

## EDUCATION

### Masters in Computer Science, Illinois Institute of Technology, Chicago

Aug 2024 - May 2026  
3.57 CGPA (on 4)

### BTech. in Information Technology, Rajalakshmi Engineering College, Chennai

Nov 2020 - May 2024  
7.9 CGPA (on 10)

## PROJECTS

### Money Man

- Developed and published a money manager app on the Google Play Store to help users effortlessly track expenses, manage income, and understand their spending habits through clean data visualizations.
- Engineered the app for **faster load times and minimal memory usage**, ensuring smooth performance **on over 92% of Android devices**.