

# MUTHUMANIKANDAN K

## COMPUTER SCIENCE ENGINEER

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## PROFESSIONAL SUMMARY

Computer Science Engineer with hands-on experience in Python development and Django-based web applications. Completed internships involving end-to-end project development and machine learning for real-time data analysis. Skilled in HTML, CSS, Git, SDLC, problem solving, and OOP. Seeking a role as Python Developer, Django Developer, or ML Engineer to contribute technical expertise to impactful projects.

## INTERNSHIPS

### Application Development Intern

RDEGI, Bangalore India, June 2024 - July 2024

- Developed a web application using Python and Django Framework as part of the internship project. Worked on designing backend logic, models, and CRUD operations to support application requirements.
- Implemented user authentication, URL routing, and database connectivity using Django ORM. Utilized HTML and CSS for front-end interface enhancement and template rendering. Managed project updates using Git version control to track and maintain code revisions.

### MERN Stack Application Development Intern

Codeshell Technologies, Madurai India, June 2025 - July 2025

Contributed to MERN stack application development by working on MongoDB, Express.js, React.js, and Node.js. Developed responsive user interfaces, built RESTful APIs, handled database operations, and implemented authentication. Collaborated with team members to debug issues, optimize performance, and deliver scalable full-stack features that enhanced usability and overall application efficiency while following industry best practices in agile development teams.

## PROJECT

### Driver Drowsiness Detection using ML & OpenCV

- The Driver Drowsiness Detection System is a real-time safety application that monitors driver alertness using computer vision and machine learning. A webcam captures facial video, and the MediaPipe Face Mesh model tracks eye landmarks to compute the Eye Aspect Ratio (EAR). When EAR remains below a set threshold for several frames, the system detects drowsiness and triggers an alarm using Winsound. Built in Python with OpenCV, NumPy, and Mediapipe, it ensures accuracy through smoothing filters and works cost-effectively with a standard webcam. Future enhancements include head-pose and yawn detection for improved reliability.

## EDUCATION

### B.E. Computer Science and Engineering

Annamalai University, Chidambaram • 2022 - Pursuring

### SSLC at Govt High School, Tamilnadu

Percentage : 84% • 2020

### HSC at Govt Hr. Sec. School, Tamilnadu

Percentage : 81% • 2022

## SKILLS

Programming Languages : C, C++, Python

Front End : HTML, CSS, JavaScript

Database : MySQL, MongoDB

Framework : Django

Version control : GitHub

## CERTIFICATIONS

Cloud Computing - NPTEL | 2024

Social Networks - NPTEL | 2025