

sunilvenkatachalam313@gmail.com linkedin.com/sunil-v | github.com/SunilV007

# **EDUCATION**

# KPR Institute of Engineering and Technology

B.Tech in Artificial Intelligence and Data Science

Expected June 2025 | CGPA: 8.35 / 10.0

# HIGHER SECONDARY EDUCATION Vidhyaa Vikas Matriculation Higher Secondary School, Tirupur Scored 86.5% in Board Exam

SECONDARY SCHOOL EDUCATION Vidhyaa Vikas Matriculation Higher Secondary School, Tirupur Scored 80.6% in Board Exam

# **SKILLS**

# **PROGRAMMING LANGUAGES**

Python • Java • C

## WEB DEVELOPMENT

HTML • CSS • JAVASCRIPT • REACT

## **DATABASES**

MySQL • PostgreSQL

#### **CLOUD**

AWS • Git • Jenkins • FireBase

## LIBRARIES & FRAMEWORKS

Numpy • Pandas • Scikit-Learn

• Tensorflow • REST APIs

#### AI & ML SKILLS

Machine Learning • Deep Learning

- CNN Natural Language Processing
- Large Language Models (LLMs)
- Model Deployment

# **INTERESTS**

#### **TECHNICAL**

Machine Learning • Generative AI • Large Language Models • Full stack

# **NON-TECHNICAL**

Sports • Editing • Technology Exploration

# **CERTIFICATIONS**

- Advanced Python Programming
- Data Analytics with Python NPTEL
- Core Java L&T

# **PROJECTS**

## DROWSY DRIVER DETECTION

- Achieved 94% accuracy in detecting drowsy driver states by building and training a Convolutional Neural Network (CNN) model with TensorFlow and Keras.
- Reduced accident risk by enabling **real-time alerts** when eyes remain closed or yawning is detected for over 3 seconds.
- Ensured real-time performance by applying **image preprocessing**, **model optimization**, and **OpenCV integration** for frame-wise detection in under 50ms.

# **EV CHARGING APP**

- Built a **Flutter** mobile app that enables users to book **EV charging slots**, improving convenience and reducing wait times by **30%**.
- Improved infrastructure efficiency by 15% using an SVR-based prediction model that analyzed charging station usage patterns.
- Ensured smooth user experience under high traffic by conducting **load testing** and **performance monitoring**, scaling the app to support concurrent bookings.

# MOCK INTERVIEW ASSIGNMENT [Live Link]

- Designed and deployed a React-based web application that helped students improve interview performance, achieving 40% faster practice sessions compared to traditional prep methods.
- Enhanced realism by implementing **text-to-speech** for Al interviewer questions and **speech-to-text** for user responses, resulting in a **25%** increase in engagement.
- Integrated Gemini API for dynamic question generation and real-time feedback; planning a custom LLM model to deliver role-specific interview simulations with improved accuracy.

# WORK EXPERIENCE

# **COGNIZANT TECHNOLOGY SOLUTIONS**

Feb 2025 - Present | Coimbatore

- Part of the **Non-Functional Testing (NFT)** team, undergoing extensive training on performance testing tools.
- Gained hands-on experience with tools like **LoadRunner**, **JMeter**, and APM tools such as **AppDynamics**, **PerfMon**, etc.
- Learned performance monitoring, script creation, and analysis techniques for enterprise-level application testing.

## **ZOHO CORPORATION** I INTERNSHIP

June 2023 - July 2023 | Chennai

- Gained practical experience in developing and deploying machine learning models using **TensorFlow**, **Scikit-learn**, and **Keras** for real-world applications.
- Explored **Generative AI** applications and worked with **Natural Language Processing (NLP)** techniques for text analysis and automation.
- Gained exposure to Large Language Models (LLMs) and their implementation in business applications for content generation and intelligent automation.