

# Raj kumar R

Driven and meticulous software developer with a solid understanding of current technologies. Excited to leverage academic knowledge in real-world projects, tackle complex challenges, and contribute effectively to team success in a dynamic setting

 rajkumarrajan002@gmail.com

 7603990847

 Chennai

 linkedin.com/in/raj-r-3487a22a5

## WORK EXPERIENCE

### AI/ML Engineer

Iopex Technologies

09/2024 - 10/2025

Chennai

Achievements/Tasks

- Built and optimized **machine learning models** using **Python, Scikit-learn, and TensorFlow** for predictive data analysis and pattern recognition.
- Performed **data cleaning, feature engineering, and model evaluation** to improve accuracy and performance on real-world datasets

### Backend Developer

Heptre Techworks

05/2024 - 08/2024

Chennai

Achievements/Tasks

- Developed and maintained **backend services** using **Python and FastAPI**, working with MySQL/PostgreSQL databases and ensuring smooth API performance through efficient code practices and Linux-based environments
- Implemented and supported **AWS-based deployments** using EC2, S3, and Lambda, while managing version control with Git/GitHub and performing API testing with Postman to ensure stable and reliable application delivery.

### Frontend Development

DLK technologies

Achievements/Tasks

- Developed responsive and user-friendly web interfaces using React.js, JavaScript, HTML, and CSS, ensuring clean component structure, optimized rendering, and smooth user interactions across devices.
- Implemented modular UI components and integrated API-driven data using JavaScript and React.js, improving maintainability, enhancing visual consistency, and delivering efficient, high-quality frontend workflows.

## EDUCATION

### Bachelor Of Engineering

Velammal Engineering College

08/2020 - 06/2024

Chennai CGPA-8.3

Courses

- Computer Science And Engineering

### Secondary School Of Education(SSLC)

Sri VDS Jain Hr.Sec School

06/2017 - 04/2018

Thiruvannamalai Percentage-85

### Senior Secondary School of Education

Sri VDS Jain Hr.Sec School

06/2019 - 03/2020

Thiruvannamalai

## SKILLS

Python

Linux

Machine learning

Javascript

React JS

SQL

Networking

Cloud

## PERSONAL PROJECTS

### Excel to ppt

- Engineered an **AI/ML-enabled Excel-to-PowerPoint automation system** using Python, leveraging Pandas, NumPy, and python-pptx to transform raw Excel datasets into structured, presentation-ready slides without relying on LLMs.
- Expanded an end-to-end **data preprocessing and visualization pipeline** that automated data cleaning, feature extraction, and chart creation using Matplotlib and Seaborn, significantly improving analytical accuracy and workflow efficiency.
- A **modular, scalable automation components** that standardized slide generation, boosted performance, and reduced manual reporting time by over **80%**, ensuring high-quality insights and consistent formatting across outputs.

### Emotion Detection Using Python

- Built an **emotion detection system** using Python, integrating OpenCV and TensorFlow to perform facial expression recognition with a high-accuracy **CNN-based classification model (90%+ accuracy)**.
- Implemented robust **facial landmark detection and preprocessing** workflows using Dlib and NumPy to enhance feature extraction, model performance, and real-time detection reliability.

### Smart Attendence Tracking System

- I build a **Smart Attendance Tracking System** using RFID technology to automate student identification and attendance logging, achieving **95%+ accuracy** in real-time data capture.
- Integrated a **GSM communication module** to deliver instant attendance notifications to parents and administrators, improving transparency and reducing manual follow-ups.
- Engineered a **scalable, high-performance architecture** capable of supporting large user volumes, reducing administrative workload by **60%** while ensuring system reliability, data integrity, and secure record management.

## SOFT SKILL

Decision Making

Problem Solving

Team Collaboration

Multi-Tasking and Communication

## CERTIFICATIONS

Data Analytics

Azure Fundamentals