

# SIVAKARTHICK B

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## OBJECTIVE

Aspiring ML Engineer with strong foundations in Machine Learning, Backend Development, and data-driven problem-solving, seeking to apply practical experience in model development, optimization, and real-time automation to contribute to innovative, scalable AI solutions

## EXPERIENCE

### Hyperready Technology (Juniior Developer)

Oct 2025 - Present

Currently working on real-time projects, gaining practical experience in building and training machine learning models for production use. Developing AI agents to automate repetitive tasks and enhance workflow efficiency as part of ongoing project responsibilities.

### Nitroware Technologies Pvt Ltd (Machine Learning Intern)

Jan 2025 – Feb 2025

Developed Sugarcane Yield Prediction System integrating ML models, Django web app with effective feature engineering and intuitive UI.

## EDUCATION

### KPR Institute of Engineering and Technology, Coimbatore, India

Sep 2023 – May 2027

Bachelor of Computer Science Engineering (Artificial Intelligence and Machine Learning)

CGPA: 9.16

### Saradha Vidhyalaya Matric Higher Secondary School, Tiruppur, India

HSC (+2): 92.6%

June 2021 – May 2022

SSLC: 80.6%

June 2019 – March 2020

## SKILLS SUMMARY

**Languages:** C, Java, Python, SQL

**Frameworks/ Libraries :** Numpy, Pandas, Matplotlib, Scikit-Learn, Tensorflow, Pytorch, Django, FastAPI

**Tools:** Jupyter Notebook, Google Colab, Visual Studio Code, Version Control(GitHub)

## PROJECTS

**Automated Attendance System** 🔗 Built a DL based face recognition model for automated student identification using InsightFace and pretrained CNN embeddings. Developed the system with a FastAPI and HTML/JS , including role-based login, attendance marking and report management.

**Sentiment Analysis** 🔗 Built an NLP pipeline using TF-IDF vectorization and Logistic Regression for product review classification. Developed a production-ready Python solution with Scikit-learn for real-time sentiment prediction.

**Ultrasonic Flaw Detector** 🔗 Designed an automated flaw detection system using ultrasonic sensors and Raspberry Pi for defect identification. Integrated ML algorithms for defect depth analysis with real-time LCD visualization and LED alerts.

**Hepatitis C Prediction** 🔗 Preprocessed clinical datasets and applied feature selection to identify key predictors of Hepatitis C stages. Implemented and evaluated classification models including Logistic Regression, Random Forest, and Decision Tree.

**Sugarcane Yield Prediction** 🔗 Implemented data preprocessing and feature engineering techniques to improve accuracy of sugarcane yield prediction. Developed a Django-based web interface for user-friendly predictions and visualizations.

## PUBLICATIONS

Enhancing Brain Tumor Detection and Diagnosis: Leveraging Image Processing and CNNs for Precision Healthcare – IGI Global Publication. **DOI:** 10.4018/979-8-3693-9045-0.ch020

Osteoporosis Prediction Using Machine Learning: An XGBoost Approach for Early Detection, presented at ICC ROBINS (IEEE Xplore), Coimbatore (March 2025). **DOI:** 10.1109/ICC-ROBINS64345.2025.11086173

## CERTIFICATIONS

Udemy – Python for Beginners

Coursera – Google AI Essentials

NPTEL – Introduction to LLMS, Getting Started with Competitive Programming, Industry 4.0 and IIoT, Data Analytics with Python

GitHub – GitHub Foundations

## LEADERSHIP

Chairperson – IEEE Computational Intelligence Society – KPRIET

Jan 2025 – Present

Vice President – NeuraNest Association – KPRIET

Aug 2025 – Present