

# SABARINATHAN K

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## Education

### Coimbatore Institute of Technology

*Integrated M.Sc. Data Science*

Coimbatore | August 2020 – May 2025

CGPA: 8.23

### Suguna PIP School

*PCM with Computer Science*

Coimbatore | Grad. 2020

Cum. Per:78

## Experience

### Miwafes Consultancy Pvt Ltd

*Data Analyst Intern*

July 2023 – December 2023

Chennai, Tamil Nadu

- Analyzed customer survey data to segment the customer base, identifying key preferences and behaviors, which led to a 10 percent improvement in targeted service delivery.
- Implemented a Bidirectional Recurrent Neural Network (BiRNN) model that improved customer churn prediction accuracy by 15 percent, enabling the development of personalized retention strategies.
- Developed an NLP model for customer feedback analysis, uncovering sentiment insights and service improvement areas.
- Created analytical reports that boosted customer acquisition and retention rates by 12% .

### RedBlackTree Technologies Pvt Ltd

*AIML Engineer Intern*

December 2024 - Present

Chennai, Tamil Nadu

- Designing an LLM-powered resume parsing system to extract structured data like skills, experience, education, and certifications.
- Building an interactive RAG-based chatbot to dynamically engage candidates and collect additional information.
- Integrating parsed resumes, chatbot data, and job descriptions to rank candidates based on predefined criteria for accurate shortlisting.
- Automating end-to-end workflows for resume parsing, candidate interaction, and ATS integration, reducing manual effort and improving efficiency

## Academic Projects

### [Scientific Paper Recommendation System](#) | NLP, Machine Learning, LLM

- Developed an interactive application using Streamlit for clustering and analyzing scientific papers, integrating ArXiv API and leveraging NLP techniques like TF-IDF and SciBERT embeddings.
- Implemented advanced clustering algorithms and PDF analysis features, achieving robust performance metrics and enhancing research accessibility with features like summarization and Q and A.

### [Automated Number Plate Recognition](#) | EasyOCR, OpenCV

- Developed an ANPR system using image processing techniques and a camera, achieving an 88 percent accuracy rate in real-time number plate detection and recognition.

### [Email Spam Classification](#) | NLP, Machine Learning

- Implemented a supervised learning model using the basics of NLP to classify emails received as legitimate or fake.
- Trained machine learning model using popular NLP libraries to extract relevant features and gain a classification accuracy of 82 percent.

## Technical Skills

**Programming Languages:** Python, SQL

**Frameworks:** Django, Streamlit, Langchain, RAG

**Databases:** MySQL

**Tools and Techniques:** Power BI

**Other Concepts:** Machine Learning and Deep Learning, Natural Language Processing  
Prescriptive Analytics and Generative AI

## Soft Skills and Interests

- Strategic thinking
- Active listening
- Business Intelligence
- Stock Market
- Finance

## Achievements

- Data Analysis on COVID 19 Vaccination:** Participated and presented a paper at the 2nd Virtual National Conference on Mathematical Modelling and Computation 2021..
- Melinia Hackathon, 2022:** Finalist in National level symposium conducted by CIT, 2022