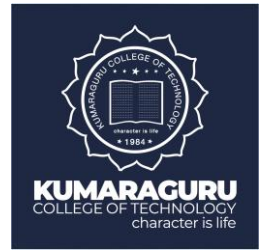


RESUME



Abharna K

Artificial Intelligence & Data Science

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abharnak19@gmail.com

LinkedIn: linkedin.com/in/abharna-k

GitHub: github.com/Abharnak

Objective:

Motivated and detail-oriented Software Developer with strong proficiency in Python, C++, and SQL. Skilled in building robust applications, optimizing database systems, and developing efficient, scalable software solutions. Eager to apply problem-solving and analytical skills to real-world development challenges, contributing to innovative and high-impact projects in software engineering and AI-driven systems.

Education:

B. Tech Artificial Intelligence & Data Science | 2022-2026

Kumaraguru college of Technology – GPA 8.55

HSE | 2021-2022

Sri Vidya Mandir Matric Hr. sec. School – 97%

SSLC | 2019-2020

Sri Vidya Mandir Matric Hr. sec. School – 99%

Experience:

Samsung PRISM Internship (Feb – Sep 2025)

Innovation Engineer Trainee at Forge Innovation and Ventures (Jan – Jun 2025)

Soft Skills:

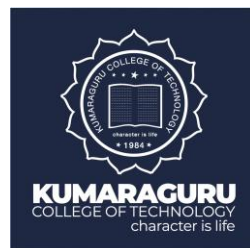
- Problem Solving
- Adaptability
- Quick Learner
- Time Management
- Team Collaboration

Technical Skills:

- Python, C++
- SQL
- HTML
- Machine Learning
- Data Visualization

Tools:

- Git
- Excel
- VS code
- Figma
- Google Colab
- Fusion 360



Projects:

Bleeding Detection in Wireless Capsule Endoscopy Images

Personal Project | Python, TensorFlow, MobileNetV2, Deep Learning

Built a deep learning model to classify bleeding and non-bleeding frames from a wireless capsule endoscopy dataset. Modified a pre-trained MobileNetV2 architecture for binary classification, achieving 97% accuracy. Applied transfer learning, image preprocessing, and regularization techniques to enhance model performance and generalization.

LLM-based Prompt Optimization for Speech-based Named Entity Recognition

Samsung PRISM Project | Python, Whisper, Phi LLM, DistilBERT, HuggingFace

Developed a backend pipeline to optimize Whisper ASR prompts using Large Language Models (LLMs) for improved speech-based Named Entity Recognition (NER). Compared 10 different prompt styles, identifying the most effective strategy to guide transcription. Implemented entity extraction with DistilBERT, prompt generation with Phi, and transcription evaluation via WER metrics. Automated the workflow from audio input to JSON-based results, demonstrating the usability of LLMs for zero-shot NER in speech.

Crop Recommendation System

Personal Project | Python, TensorFlow, Naïve Bayes, Machine Learning

Designed and implemented an AI-driven crop recommendation system that assists farmers in selecting the most profitable crops by analyzing key factors such as soil nutrient levels, and environmental conditions. Applied Naive Bayes and Random Forest algorithms to improve crop prediction accuracy up to 95% experienced in data preprocessing, feature engineering, and model evaluation for precision agriculture.

Participation & Certification:

- Participated in TANCAM Hackathon organized by Dassault Systems.
- Participated in Hackatra conducted by devpost.
- Completed Certification in Advanced Data Modelling.

Achievements:

- Mahatma Gandhi Scholarship Awardee.
- Runner Up in Intra Ideathon organized by Re.

Personal Interest

- Building personal coding projects
- Competitive programming

Languages Known

- Tamil
- English