SURAJ V

Aspiring AI&ML Engineer |

linkedin.com/in/surajv1045 | Github: suraj1045 | +91 98861 86321 | surajv1045@gmail.com

CAREER SUMMARY:

Aspiring Software Engineer currently pursuing a B.E in Artificial Intelligence & Machine Learning with strong foundations in algorithms, distributed systems, and web development. Skilled in Java, C++, Python, and SQL, with hands-on experience in API development, system design, and AI/ML applications. Experienced in leading teams and delivering scalable solutions through projects and leadership roles. Passionate about solving complex problems and building impactful software at scale.

RELEVANT PROJECTS:

Breast Cancer Detection using AI (Python, Scikit-learn, TensorFlow)

- Built a machine learning model to classify malignant vs. benign tumors using public medical datasets.
- Improved model accuracy by feature engineering with knowledge graphs and optimized pipeline with cross-validation.

Timberpath – Shortest Path Finder (Flask, Google Maps API, HTML/CSS/JS)

- Developed a web application to find shortest routes between two locations using Google Maps API.
- Built backend with Flask to handle API requests; optimized performance for real-time queries.

Sentiment Analysis Pipeline (Python, Scikit-learn, PyTorch, FastAPI, Airflow, MLflow)

- Built an end-to-end machine learning pipeline for IMDB review classification. Implemented data preprocessing, feature engineering, model training (Logistic Regression, Bi-LSTM, DistilBERT), and evaluation.
- Deployed a FastAPI-based REST service with Docker, automated workflows using Airflow, and integrated monitoring via Streamlit.

Credit Card Fraud Detection (Case Study) (R, Machine Learning)

- Conducted a data analytics case study on credit card fraud detection using classification techniques.
- Achieved high detection accuracy by applying statistical methods and feature selection.

EDUCATION:

New Horizon College of Engineering | B.E. in Artificial Intelligence & Machine Learning | 2022 – 2026 | GPA: 7.8/10

12th Std – Deeksha, PU | 2022 | Percentage: 68%   10th Std – SCTS, CBSE | 2020 | Percentage: 84%

SKILLS:

- Programming Languages: Java, C++, Python, JavaScript, SQL
- Frameworks/Tools: Flask, Spring (learning), REST APIs, Firebase, Git, Docker (basic)
- Databases: MySQL, MongoDB, Supabase
- Concepts: Data Structures & Algorithms, Distributed Systems, NLP, Machine Learning, Convex Optimization
- Other: Leadership, Technical Documentation, Event Management

PUBLICATIONS

Ramyashree PM; Harshitha Ravani; Krish Aryan; Sam Reeves Susikar; **Suraj Vijay**

"Privacy-Preserving and Efficient Border Surveillance System Using Advanced Deep Learning and Cryptographic Techniques", IEEE Xplore, Vol. 12, Issue 4, Apr 2024. DOI: 10.1109/I-SMAC61858.2024.10714893

- Contributed to the design and implementation of deep learning pipeline and cryptographic integration.

Yashas M Shetty, Yash Halappanavar , **Suraj Vijay** , Jimsha K Mathew

Harnessing the Power of Cloud Computing. Explored the capabilities of cloud computing, its scalability, and its impact on modern AI applications – Published in (IJARCCE), DOI: 10.17148/IJARCCE.2024.13625.

EXPERIENCE & LEADERSHIP

Board Member, TEDxNHCE AY(2024 – 2025)

- Coordinated events with 600+ participants, leading a 15-member organizing team.
- Collaborated with guest speakers to deliver impactful sessions, including hosting an RPA seminar with industry experts.

Core Member, Evolve.AI Tech Club AY(2023 – 2024)

- Hosted AI/ML and emerging tech workshops and conducted hackathons for 100+ students, promoting hands-on learning and collaboration.