Sarvajeeth U K

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EDUCATION

Indraprastha Institute of Information Technology, Delhi
Bachelor of Technology in CSSS (8th Semester) — *Dec 2021 – Present*

BGS PU College, Mysuru — Percentage: 96.6%
Karnataka Board of Secondary School — *2019 – 2021*

St. Joseph's Central School, Mysuru — Percentage: 95.6%
Secondary School Certificate (CBSE) — *2009 – 2019*

TECHNICAL SKILLS

Skills: Backend Development, Android Development, Data Science

Programming Languages: Python, Java, Kotlin

Backend Development: Django, Flask, REST API, Postman, SpringBoot, MongoDB, MySQL, Docker, Git

Data Science and Machine Learning: Pandas, NumPy, TensorFlow, Keras, scikit-learn, OpenCV, LSTM

EXPERIENCE

Research Intern — Complex Systems Lab, IIIT Delhi — Aug 2023 – Present
Machine Learning for Computational Gastronomy
Built ML models for allergen detection in a Protein Sequence
Engineered a recipe recommendation system using collaborative filtering, deployed via Flask.

Data Science Intern — Excelsoft Technologies Pvt Ltd — May 2024 – Jul 2024
Data Science & Data Analyzation
Built predictive models for user engagement analysis using TF-IDF and cosine similarity.
Performed data cleaning and exploratory analysis to optimize content personalization accuracy

Developer Intern — Caliper Business Solutions — May 2023 – Jul 2023
Backend Development & API Integration
Automated SMS alerts for adverse weather using Twilio API, reducing logistics delays by 30%.
Designed geo-fencing system with Django, improving truck route compliance by 25%.

PROJECTS

SafeChoice - Personalized Product Safety Checker — *Mar 2024 – Present*
Built a Streamlit app that scans product barcodes and checks safety based on user allergies/health conditions
Integrated OpenFoodFacts API to retrieve product details and analyze ingredients against user profiles
Created intuitive interface with clear safety indicators and detailed ingredient breakdowns
Implemented user authentication and profile management system for personalized recommendations
Tech: Python, Streamlit, OpenFoodFacts API, Pandas, SQLite — ⍾ Code

MedEase — *Dec 2024*
Built a machine learning model to predict hospital readmissions using FHIR API for data integration.
Implemented an OpenAI summary generator to provide concise and actionable insights from patient data.
Tech: Python, Jupyter Notebook, Machine Learning, FHIR API, OpenAI API — ⍾ Code

ML Allergen Model — *Jan 2024 – May 2024*
Developed a machine learning pipeline for allergen classification with TensorFlow and scikit-learn.
Improved prediction accuracy through feature selection, data augmentation, and hyperparameter tuning.
Technologies: Python, TensorFlow, scikit-learn. ⍾ Code

Traffic Terminator - Namma Yatri Peak Hour Solution — *Jan 2024 – Oct 2024*

Developed AI-driven solution to optimize taxi supply-demand balance during peak hours in Bengaluru. Implemented hotspot prediction using LSTM Neural Networks and created dynamic pricing system using Q-Learning Reinforcement Learning model. Developed intelligent ride matching algorithm and queue management system for efficient ride distribution.

Implemented WhatsApp integration for accessibility and subscription-based model (Namma Yatri Plus) with priority access. Created loyalty queue system based on ride history and experience-based incentives for drivers to increase engagement and retention.

Built comprehensive dashboard for monitoring hotspots, dynamic pricing, ride sharing benefits, and driver recommendations. **Tech**: Python, Machine Learning, Reinforcement Learning, NLP, Geospatial Analysis — ⭕ Code

Course ChatBot & Suggester   *Nov 2024 – Jan 2025*

Built a chatbot using NLP and FAISS for university course regulation queries.

Extracted and indexed PDFs for fast and accurate responses.

Tech: Python, Flask, FAISS, NLP — ⭕ Code

Moodipy: Emotion-Based Music Player   *Aug 2024 – Nov 2024*

Integrated emotion detection with Spotify API for real-time music recommendations.

Used a deep learning model to classify emotions from facial expressions.

Tech: Python, Flask, TensorFlow, Spotify API — ⭕ Code

WeatherApp   *June 2024 – Aug 2024*

Developed an Android app for real-time and predictive weather data.

Technologies Used: Kotlin, OpenWeather API, Android Studio. — ⭕ Code

AWARDS AND ACHIEVEMENTS

Dean's Award for Academic Excellence: Received in my 3rd Year at IIITD.

Finalist, The Great Bengaluru Hackathon : Placed in the top 9 out of 150+ teams in this prominent innovation event.

2nd Place - Enactus Hackathon: Recognized for innovative project development.

Competitive Programming: Solved 500+ problems on LeetCode, emphasizing expertise in Data Structures and Algorithms.

INTERESTS AND HOBBIES

Extra Activities: Chess, Trekking, and exploring nature.

Project Development: Passionate about building innovative software projects and experimenting with new technologies.

Music : Enjoy listening to tech podcasts and music while coding.