Varun Sasikumar

✉ varunkofficial03@gmail.com   📞 +91 8137052733   📍 Thrissur, Kerala, India   🔗 https://github.com/Varun-K34

in linkedin.com/in/varun-k03

PROFILE

A dedicated **software developer** with experience in **mobile application development**, **data analysis**, and **AI-driven solutions**. Proficient in building full-stack applications with a focus on clean architecture, real-time communication, and seamless integration of backend services. Currently pursuing a **B.Sc. in Data Science and Programming** at **IIT Madras**, sharpening my skills in **machine learning**, **data science**, and **cloud technologies**. Skilled at combining **backend frameworks** and **APIs** with user-centric frontend development to deliver impactful solutions.

EDUCATION

Indian Institute of Technology Madras, *Bachelor of Science - B.Sc*   2022 – present | Tamil Nadu

APJ Abdul Kalam Technological University,   2020 – 2024 | Kerala
Bachelor of Technology - B.Tech
  Percentage : 76

Central Board of Secondary Education - CBSE,   2017 – 2019 | Kerala
Senior Secondary Education
  Percentage : 78

SKILLS

Python | C Programming | C++ | HTML | Flutter | Java | SQL | Git | MS Office | Figma

PROFESSIONAL EXPERIENCE

EMPIRE AE IT SERVICE, *Flutter Developer (Freelancer)*   Jul 2024 – Oct 2024 | Kochi

- Designed and developed user-friendly mobile interfaces using **Flutter**, based on design prototypes in **Figma**.
- Integrated **REST APIs** to enable backend communication with a **Django-powered** server.
- Implemented secure payment functionality using **Razorpay**, ensuring robust transaction handling.
- Set up **Agora RTC** and **RTM** for real-time audio calling features within the application.
- Managed the interaction between front-end and back-end systems, ensuring seamless data flow and efficient app performance.
- Project: **CallMatch**

Flutter Developer (Freelancer)   Nov 2023 – May 2024

- Developed the user interface of a mobile application using **Flutter** and integrated it with **Firebase** for user authentication and chat functionality.
- Implemented an **AI-powered assistant** using a **BERT model**, enabling natural language interactions for users.
- Developed **secure payment handling** with **Razorpay** integration, ensuring smooth financial transactions.
- Utilized **Flask** for seamless communication between the mobile front-end and the AI model running on the backend.

PROJECTS

Biolx - Biomedical Entity Recognition System

- **Tech Stack:** Flutter (front-end), Flask (back-end), BERT & CRF (NLP algorithms), Git (version control)
- Developed a mobile app to extract and recognize biomedical entities from complex English texts.
- Utilized **BERT** and **CRF** models for **NLP-based** biomedical entity recognition, delivering precise and meaningful data.

- Achieved **precision averaging 70.30%**, **recall averaging 84.23%,** and an **F1-score averaging 76.23%,** demonstrating the system's strong performance in accurately recognizing biomedical entities.
- Integrated **Flutter** with **Flask** for real-time data processing, ensuring accurate recognition and streamlined data flow between the front and back ends.

Sten_X - Text Summarization App

- **Tech Stack:** Flutter (front-end), Python (NLP), Flask (API development).
- Designed a mobile app for summarizing large volumes of text using **NLP algorithms** in **Python**.
- Developed a **Flask API** to connect the Flutter-based front-end to Python-based back-end NLP models.
- Ensured a responsive and user-centric UI using **Flutter**, integrated with Python's **NLP libraries** for text summarization.

InspiroQuote - Quote Generator

- **Tech Stack:** HTML/CSS (front-end), Python (back-end), SQLite (Database)
- Built a dynamic web application to generate inspirational quotes over visually appealing backgrounds.
- Integrated Python for backend logic, ensuring smooth quote generation and dynamic content display.

CERTIFICATES

Foundational Level in Programming and Data Science	**Getting Started with AWS Machine Learning**	**Network Engineering - Routing & Switching**
IIT Madras	Amazon Web Services (AWS)	LIVEWIRE

PUBLICATIONS

Biomedical Named Entity Recognition System,

International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)

AWARDS

Best Outgoing Student, *Received at Rajadhani Institute of Science and Technology*