KARLAPATI AALOKHYA

Mobile:9063912825 | Email:aalokhyakarlapati@gmail.com | LinkedIn | GitHub

EDUCATION

B.Tech in Computer Science and Engineering - C.G.P.A: 8.94 2023 − 2026
SR University

Diploma in Computer Engineering - C.G.P.A: 9.92 2020 − 2023
VMR Polytechnic

COURSEWORK

Object Oriented Programming Through Python, Operating Systems, Computer Networks, Design and Analysis of Algorithms, AIML, Software Engineering, Data Mining.

PROJECTS

Micro Debt Tracker (Flask, MySQL, PythonAnywhere)
- Engineered the back-end of a minimalist Flask application to oversee communal expenses, decreasing reconciliation time by 3 hours per week, hosted on PythonAnywhere and improving financial transparency. **Verify**

Diabetes Prediction (ML Algorithm - k-NN and SVM, Gradio)
- Created a model using the k-NN and SVM algorithms to predict Diabetes, achieving **91% accuracy**. Processed and analyzed medical data to identify key features, improving the model's accuracy and aiding early diagnosis.
- Designed an interactive web interface using **Gradio**, enabling real-time input and delivering prediction results within under 2 seconds per query
- Serialized trained models using **Pickle** and deployed a live demo on Hugging Face Spaces, ensuring 24/7 accessibility for AI-driven healthcare support. **Verify**

Real Time Epilepsy Detection (ML Algorithm - SNN)
- Developed an epilepsy detection model using Spiking Neural Networks (SNNs), achieving **90%** accuracy. Processed EEG signals from multiple channels, converting them into spikes for analysis and effective seizure detection. **Verify**

TECHNICAL SKILLS

Languages: C, C++, Python, Java, HTML, CSS, JavaScript, SQL, Kotlin
Tools and Technologies: VS Code, Arduino, Android Studio, Git, Firebase, PythonAnywhere, Hugging Face
Frameworks and Databases: Flask, AngularJS, MongoDB, MySQL

ACHIEVEMENTS

- Winner of the internal hackathon at Smart India Hackathon for developing an innovative solution using **Piezoelectric Tiles for Sustainable Energy Generation**, resulting in **20 percent reduction in energy costs and promoting eco-friendly infrastructure by harnessing renewable energy from foot traffic.**
- Gained practical knowledge of Linux security and network threat mitigation through the **Endpoint Security** certification from Cisco Networking Academy. **Verify**
- Earned the **MongoDB Basics for Students** certification from MongoDB University, demonstrating skills in NoSQL databases, document model design, and MongoDB Atlas deployment. **Verify**
- Certified in **Android App Development** by Internshala Trainings – Gained hands-on experience in **Kotlin**, **Jetpack Compose**, **Firebase**, and **Android Studio** for mobile app development. **Verify**
- Developed expertise in data analytics and visualization by completing the **Data Analytics Essentials** course from Cisco Networking Academy. **Verify**

POSITIONS OF RESPONSIBILITY

Secretary of GitHub Community, SR University 2024 − 2025
Spearheaded community initiatives, organized workshops, and facilitated coding events, fostering peer learning and open-source contributions within the university.

Treasurer of Data Science Club, SR University 2023 − 2024
Managed club finances and budget allocation, supporting data science workshops and events to foster peer learning.

DECLARATION

I hereby declare that the above given information is true to the best of my knowledge.