SUMIT SAXENA

+91-8447590715   sumitsaxenah806@gmail.com   Linkedin   Github

SKILLS

Technical Skills: C, Python, HTML, MySql

Soft Skills: Problem-Solving, Grit, Teamwork, Communication

Coursework: Control System, Signals and System, Digital Electronics, Embedded System, Machine Learning

Developer Tools: VS Code, Eclipse, Keil, Jupyter

Technologies/Frameworks: TensorFlow, Pytorch, GitHub

Experience

Pantech Solution   **May 2023 – June 2023**

Embedded System Engineer Intern   *Remote*

- Conducted hands-on practice in Embedded Systems and Design, focusing on microprocessors and **ARM Cortex-M architecture.** Applied Proportional-Integral-Derivative (PID) controllers for system optimization.
- Designed mini robotic systems using **ARM Assembly** for motion control and obstacle detection.

Edunet Foundation   **June 2024 – July 2024**

AI and Cloud Technology Intern   *Remote*

- Created and deployed AI models using **IBM Watson** and other AI tools on the IBM Cloud Platform.
- Enhanced proficiency in **Python**, **TensorFlow**, and **IBM Watson services**
- Participated in team-based model **deployment** challenges, improving solution turnaround time.

CODTECH IT Solutions Pvt. Ltd.   **July 2024 – August 2024**

Machine Learning Intern   *Remote*

- Built a **Text-to-Image Generato**r using **GANs**, improving prototype usability by **40%**
- Developed a **Credit Card Fraud Detection System** utilizing **Python** and **Jupyter Notebook**, reducing **fraud detection** time by **30%** through optimized algorithm efficiency and robust feature engineering.
- Applied **NLP techniques** for **sentiment analysis** on movie reviews, achieving **85% prediction accuracy** with libraries such as NLTK and Scikit-learn.

Projects

Hills to Highways Github live link| Python, Flask, Jupyter, GeoPandas, Scikit-learn, React   **September 2024**

- **Created** a **machine learning model** to **predict road connectivity**, optimizing construction plans for **rural and hilly regions** and increasing user accessibility through an **intuitive UI**.
- **Integrated multiple models** and **boosted predictive accuracy by 25%, enhancing geographical coverage.**

E-commerce Fraud Detection Dashboard Github | Python, Flask, JavaScript, Pandas, Matplotlib   **August 2024**

- Engineered a robust **fraud detection system** using **Python, Flask,** and state-of-the-art **anomaly detection algorithms,** achieving a **25%** improvement in **fraud identification** accuracy and optimizing **transaction security.**
- Deployed **real-time data analytics and visualization** dashboards with **Pandas and Matplotlib,** providing actionable insights into **anomalies,** enhancing **fraud prevention strategies,** and improving operational scalability.

Text-to-image generator Github Link |Python, Jupyter, GANs   **January 2025**

- Engineered a **Text-to-Image Generation** system using **Python** and **GANs** to convert text into **high-quality images**,
- Reduced **image generation latency** by **15%** through performance optimization techniques.

Achievements & Certifications

- **1st Place** (**ML** Track) at the **Hack-A-Sol 3.0 Hackathon**, by **IIIT NR**, out of **3,000 teams**.   **September 2024**
- Awarded a **Certificate of Recognition** by the **Ministry of Electronics & Information Technology** for my role as a **Campus Ambassador**
- Winner of the **Star Writer Competition** by **Times of India,** out o**f 500** participants**,** for exceptional **content creation** and **image interpretation skills.**

Education

Dr. Bhimrao Ambedkar University, Agra   **December 2021 – July 2025**

Bachelor of Engineering in Electronic and Communication   **CGPA - 8.27/10**