+91 9871077601

samridh@iiotengineers.com

www.iiotengineers.com

www.linkedin.com/in/samridhvaasu

www.github.com/SamridhVaasu

Education

B.Tech (IIoT) [2023-27]
Guru Gobind Singh Indraprastha University

Senior Secondary (12th) [93%] [2023]
Modern Convent School, Dwarka, New Delhi

Secondary (10th) [95.6%] [2020]

Technical Skills

AI, ML and Deep Learning:
TensorFlow, OpenCV, Neural Networks, CNN, Jupiter Notebook, Streamlit, Keras, Scikit-learn

Internet of Things (IoT):
Arduino, Raspberry Pi, NB-IoT, LoRa, LoRaWAN

Cloud Computing:
Google Cloud Platform (Compute Engine, Cloud Storage, BigQuery, AI & ML)

Web Technologies:
HTML, CSS, JavaScript (for portfolio)

Certifications

- **Black Belt in Karate** – Achieved black belt status with multiple competition medals.
- **Google Cloud Study Jam** – Explored Google Cloud's compute, storage, data analytics, AI & ML tools.
- Internet of Things Business Impact
- Ethics in the Age of Generative AI
- Introduction to Artificial Intelligence

SAMRIDH SINGH
Industrial IoT Engineering Student

👤 Profile

IoT Engineer in training with a strong passion for Arduino, Robotics, and AI. Cyber Hackathon Winner (Delhi Police), dedicated to developing innovative solutions in technology.

🎗 Achievements

Cyber Hackathon (Delhi Police)

- Built a spam **SMS detection system** by developing an **industry-grade machine learning model.**
- Implemented a **Multinomial Naive Bayes** algorithm, achieving an **accuracy of 97%+** in detecting spam messages.
- Collaborated with a cross-functional team to build the project, **winning the hackathon** for innovation and technical excellence.
- Demonstrated the potential for **real-world application** in cybersecurity, contributing to the **detection and prevention of fraudulent activities.**
- Developed cybersecurity solutions in a **collaborative team environment,** contributing to cybercrime prevention.

Smart India Hackathon Finalists

- **Led a team** to develop an innovative **portable non-contact device for measuring eye pressure in glaucoma patients**.
- **Team Leadership:** Led a multidisciplinary team through the hackathon rounds, ensuring **collaboration across hardware and software components.**
- **Innovation:** Integrated IoT and image processing techniques to develop a **real-time, non-invasive solution that can measure eye pressure without physical contact.**
- **Nominated by University:** Cleared both initial rounds and earned university nomination for the Smart India Hackathon 2024.

💼 Work Experience

AUG 2024 – Sep 2024

Institution of Electronics and Telecommunication Engineers (IETE)
Internship [August 2024 - September 2024]

- Gained hands-on experience in image processing techniques using OpenCV, contributing to real-time object detection projects.

June 2024 – July 2024

Pantechelearning
IoT Intern [June 2024 - July 2024]

- Worked with Arduino IDE, microcontrollers, and sensors to develop real-time IoT solutions.

Workshops/Seminars

- 5G and Beyond Conference – IIT Delhi
- Arduino and Mobile Robotics Workshop – IIT Delhi
- IoT Workshop – Eigen Technologies Pvt Ltd
- Open Day Event – National Physical Laboratory (NPL)
- Enabling Massive IoT with LPWAN Technologies (IEEE)
- Maths for Programers (Scaler)

Position of Responsibility

Executive Member, IEEE
- Part of Organising team various technical workshops, each attended by 100+ students on topics such as IoT, embedded systems, and AI.

Management Team Member, ACM (Advance Computing Club)
- Contributed to club initiatives that promote innovation in computing and foster a collaborative environment for students interested in advanced computing technologies.

Cocurricular Activities

Black Belt in Karate
Achieved black belt status and won multiple medals in regional and national karate competitions, demonstrating discipline, perseverance, and leadership.

Model United Nations (MUN) & Roundtable Conferences
Active participant in numerous MUNs and roundtable conferences, honing public speaking, negotiation, and critical thinking skills while engaging in discussions on global issues.

Hackathons & Ideation Competitions
Regularly engaged in hackathons and competitions, developing innovative solutions to real-world problems and collaborating with diverse teams on technology-driven projects.

Personal Information

Father's Name: CA Janardan Singh (Currently working on as COO at MBG Corporate Services)

Mother's Name: Smt. Neelu Singh

Date of Birth: 29 November 2005

Marital Status: Unmarried

Gender: Male

Projects

Real-time Plant Disease Detection using Deep Learning

Technologies: CNN, OpenCV, TensorFlow, Streamlit

Developed a deep learning model (**97%+ accuracy**) using **Convolutional Neural Networks (CNN)** for detecting plant diseases from leaf images.
- Enhanced functionality with **real-time disease detection** through camera feeds using OpenCV.
- **Deployed on a web interface** using Streamlit, enabling users to upload images or use live video streams for plant health analysis.
- **Achieved over 97% accuracy** in classifying various plant diseases.
- Processed real-time video feed with OpenCV for live disease detection.
- Deployed web app with 24/7 accessibility for live predictions and image uploads.

Spam Message Detection with Machine Learning

Technologies: Python, Streamlit, scikit-learn, Data Preprocessing

Created a machine learning model to detect spam messages based on user input. The system preprocesses text data, builds a classifier, and evaluates performance using various metrics. Deployed as an interactive web app for spam detection.
- **Achieved over 97% accuracy** in classifying various plant spam messages.
- **Cleaned and preprocessed raw text data** to enhance model performance.
- Conducted **Exploratory Data Analysis (EDA)** on message distributions.
- Trained and evaluated models using algorithms like L**ogistic Regression, achieving high accuracy.**
- **Built and designed the frontend** using Streamlit and Pycharm, presenting the prediction results visually to users.

Responsive Portfolio Website

Technologies: HTML, CSS, JavaScript

- Designed and implemented the UI using **HTML, CSS, and JavaScript.**
- Ensured responsiveness across various device types.
- Showcased project work, blog posts, and contact information in a visually appealing format.
- Logo Placement: Positioned the logo strategically on the home page for branding consistency while maintaining minimalistic design across subpages
- Custom Navigation: Implemented a responsive and visually appealing navigation bar, improving user experience and accessibility.