

SAADGI PUNIWALA

Bengaluru, India | +91 7869724435 | saadgipuniwala07@gmail.com

[GitHub](#) | [LinkedIn](#)

SUMMARY

Computer Science (Data Science) undergraduate at Dayananda Sagar University (CGPA 9.09/10). Skilled in machine learning, data analytics, Python, and IoT systems, with hands-on experience delivering deployed AI-driven projects and a research publication under review. Seeking an AI/ML or Data Science internship to apply analytical and problem-solving abilities to real-world data challenges.

EDUCATION

Bachelor of Technology — Computer Science Engineering (Data Science)

Aug 2024 – Present (Expected 2028)

Dayananda Sagar University, Bengaluru — CGPA: 9.09 / 10

TECHNICAL SKILLS

- **Languages:** Python, C, C++, SQL (MySQL), MongoDB
- **Machine Learning:** NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, data preprocessing, feature engineering, model training & evaluation, predictive analytics
- **Web Development:** HTML, CSS, Flask, Streamlit, GitHub Pages, Streamlit Cloud
- **IoT & Embedded Systems:** ESP32, Arduino IDE, sensor integration, serial communication, servo motor control, AHT10, PIR, LDR, YL-83, MG996R
- **Tools & Platforms:** Git, GitHub, Jupyter Notebook, Google Colab, VS Code, Kaggle
- **CS Fundamentals:** Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks

PROJECTS

AI-Powered Smart Window Ventilation System | Python, ESP32, AHT10, PIR, LDR, YL-83, Servo Motor | [Live Demo](#) | [GitHub](#)

- Built an automated IoT ventilation system fusing four real-time sensor streams (temperature, humidity, rain, motion) to drive window servos with no manual intervention.
- Implemented decision logic spanning 5+ environmental scenarios, cutting sensor-to-action response time to under 1 second; deployed a live demo via GitHub Pages.

Student Performance Prediction Using Machine Learning | Python, Pandas, NumPy, Scikit-learn, Matplotlib

- Trained and benchmarked classification models (Random Forest, Logistic Regression) on 1,000+ student records to forecast academic outcomes, reaching 85%+ accuracy.
- Delivered an end-to-end pipeline — data cleaning, feature engineering, cross-validation — with visual reports including confusion matrices and feature-importance charts.

RF Signal Intelligence Dashboard | Python, Streamlit, Machine Learning

- Built an AI-driven web dashboard for RF spectrogram analysis, classifying signals in real time as Friendly, Unknown, or Hostile with sub-2-second speed.

Overhead Conductor Fault Detection | Python, Flask, HTML, CSS, JavaScript, Google Maps API | [Live Demo](#) | [GitHub](#)

- Developed a Flask-based monitoring dashboard for low-voltage AC distribution poles, transforming simulated LoRa sensor feeds into live Healthy/Warning/Alert statuses.
- Built role-based officer and field-staff views with pole-level detail pages, map-pinned locations, and end-to-end repair task assignment and tracking.

RESEARCH PUBLICATIONS

AI-Powered Smart Window Ventilation & Environmental Control | InnovateX 2025 (Under Review)

- Co-authored a publication on a multi-sensor IoT system (ESP32, AHT10, PIR, LDR, YL-83) driven by a rule-based AI engine computing a Comfort Deviation Index (CDI) for servo-based window automation.
- Paired the system with a real-time Flask + Chart.js dashboard, achieving a 31% reduction in ventilation energy use and a 27% improvement in occupant comfort.

CERTIFICATIONS

- Google Data Analytics Professional Certificate — Google (In Progress)
- Python for Data Science — NPTEL / IIT Madras (Elite, Top 5%, Score: 80%)
- Intro to Machine Learning — Kaggle | Introduction to Data Visualization — Simplilearn
- Programming Using Java — Infosys Springboard | Hands-on IoT Workshop — DSU / Karunadu Technologies

HACKATHONS & PRACTICAL EXPERIENCE

- SIH Internal Hackathon, DSU (2024): Designed the solution architecture and delivered a working prototype for a national-level problem statement.
- Code Class, DSU Coding Competition (2025/2026): Competed in a timed contest testing problem-solving and coding proficiency.
- Celesta AI, IEEE-Organized College Competition: Built a working AI prototype for the challenge.