Sanat Kumar Patra

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CAREER OBJECTIVES

Aspiring Robotics and Automation engineer with hands-on experience in embedded systems, IoT, and machine learning. Eager to contribute innovative and data-driven solutions in real world applications, leveraging strong technical skills in Python, Arduino, and MATLAB. Seeking a challenging role to grow professionally while solving engineering problems through interdisciplinary technologies..

ACADEMIC OUALIFICATION

Bachelor of Technology in Robotics and Automation

Brainware University (Autonomous)

Year of Passing: 2026, Percentage: 86.88%

• Higher Secondary (Class XII)

Nayabasat Parbatimoyee Siksha Niketan (W.B.C.H.S.E)

Year of Passing: 2022, Percentage: 82.00%

Secondary (Class X)

Nalbona High School (W.B.B.S.E)

Year of Passing: 2020, Percentage: 72.71%

TECHNICAL SKILLS

• Programming & Tools:

Python (Basic), C (Intermediate), C++ (Basic), Arduino IDE, Google Colab

Robotics & Embedded Systems:

Arduino | ESP32 | Raspberry Pi | ROS (Basic) | MATLAB/ Simulink (Basic)

• Design & Simulation:

SolidWorks, KiCAD, Tinkercad, Wokwi

• Control & Electronics:

PID Control, Sensor-Actuator Interfacing, Electronic Circuit Design

• Data Science & Machine Learning:

Basic ML – Classification, Clustering, PCA, Model Evaluation

Libraries – Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn

• Documentation & Office Tools:

Microsoft Word, Excel, PowerPoint, LaTeX (Basic)

• Soft Skills:

Time Management, Teamwork, Situational Awareness

INDUSTRIAL TRAINING AND INTERNSHIPS

• Training on Machine Learning from Indian Institute of Internship 1st Jul, 2025 – 1st Aug, 2025

Duration – 1 Month

• Training on Internet of things (IOT) from Ardent Computech Pvt. Ltd 21st Jan ,2025 – 21st Mar,2025

Duration – 2 Month

Value added course on "Realization of Signal Characteristics

Using MATLAB Tools" Organised by the Department 1st Feb ,2023- 14th Feb,2023

Of Electronics & Communication Engineering of Brainware University.

Duration – 2 weeks

• Attended a industrial visit to MSME Tool Room Kolkata.

Duration – 1Day 24th Feb ,2024

• Attended a industrial visit to "NETAJI SUBHAS CHANDRA BOSE TELECOM

TRAINING CENTRE" In Kalyani (BSNL). 2nd Nov, 2022

Duration - 1 Day

ACADEMIC PROJECTS

Arduino Based smart Dustbin:

Developed a contactless smart dustbin using Arduino Uno, ultrasonic sensor, Nov 2023 and servo motor to enhance hygiene during COVID-19.

• Voice control Wheel Chair:

Built a prototype wheelchair using Arduino and speech recognition module Mar 2024 to enable hands-free voice control for mobility-impaired users.

• WIFI based home automation and weather monitoring system:

Designed a home automation system with ESP32, enabling Wi-Fi-based Mar 2025 control and real-time temperature/humidity monitoring via web/mobile interface.

Aug 2025

• Diabetes Prediction Using Machine Learning

Implemented ML models (Logistic Regression, Random Forest) using the PIMA Diabetes Dataset. Performed EDA, feature scaling, and model evaluation with accuracy, confusion matrix, and classification report. Visualized feature importance to interpret model decisions.

EXTRA-CURRICULAR ACTIVITIES

• Participated in a **Mission Nirmal Bangla program** organized by a club in our area 2019

Joined as a Member of Nalbonan Ramkrishna vivekananda Seba Sangha in Our Village

LANGUAGE AND HOBBIES

- Language Bengali (Native), Hindi (Fluent), English (Basic Working Knowledge)
- **Hobbies** Watching Movie, Travelling, Playing Cricket, Listening Song.

SELF DECLARATION

I hereby affirm that all the information that I have stated are true and correct to best of my knowledge

SIGNATURE: Sanat Kumar Patra

DATE:4th Aug, 2025