

# Subhajit Sen ECE Engineering Student +91 8509877639 | aec.ece.subhajitsen.2026.070@gmail.com | LinkedIn | GitHub

## Summary

Electronics and Communication Engineering student with a strong foundation in programming and applied technology. Proficient in C, HTML, CSS, Python, and Machine Learning, with experience in hardware-software integration. Passionate about creating innovative, tech-driven solutions and continuously expanding technical expertise.

#### Education

Asansol Engineering College, Asansol B. Tech in Electronics and Communication Engineering Bankura Goenka Vidyayatan, Bankura Higher Secondary Examination

Bankura Goenka Vidyayatan, Bankura

Secondary Examination

## Skills

Technical Skills: C Programming, HTML & CSS, Python

Libraries: NumPy, Pandas, Matplotlib

Core Concepts: Control System, Computer Networks

Soft Skills: Communication, Time Management, Teamwork, Working under Pressure

## **Projects**

# Voice-Recognition E-Waste Robot

Repo

06/2022 - 06/2026

CGPA: 7.00

Marks: 87%

Marks: 87.29%

2021 - 2022

2019-2020

- Created a static AI robot from e-waste for the NAAC visit (Dec 4, 2023), combining speech-based interaction and IoT-driven motion detection.
- 3D Design: Modeled the robot's structure using Pepakura and AutoCAD.
- AI Module: Enabled bidirectional voice interaction using speech recognition and text-to-speech synthesis.
- IoT System: Integrated ultrasonic sensors with Arduino to trigger reactive head movements based on proximity.

## Aspect-Based Sentiment Analysis for E-commerce Reviews

Repo

- Analyzed customer reviews from a Kaggle dataset to derive sentiment trends and support business
- Applied NLP techniques including preprocessing, vectorization, and feature extraction for model input.
- Achieved strong classification accuracy using Logistic Regression and compared results with alternative models.
- Compiled findings into a detailed report highlighting key insights and model performance.

# Ultrasonic Glasses for the Visually Impaired

Repo

- Developed Arduino Nano based smart glasses equipped with ultrasonic sensors for real-time obstacle detection, aiding individuals with visual impairments.
- Implemented an adaptive buzzer feedback system so that whenever it detects an object it beeps and alerts the user.
- Designed a low cost, wearable assistive device prioritizing user comfort, safety and mobility.

## Courses

Data Structures using Python – Udemy

### Languages

English (Native), Bengali (Native), Hindi (Native)