

SUMIT BARUA

@sumitbrsumit@gmail.com

📍 Dhaka, Bangladesh

📧 sumitbr

📞 +8801521526029

🌐 SumitBr

PROJECTS

Brain Tumor Detection

📅 Dec 2024 – Ongoing

Currently developing a deep learning model for the automated classification and segmentation of brain tumors using MRI images. and sensitivity.

- Actively staying up-to-date on medical imaging and AI to help improve current projects and contribute to the growing field of brain tumor classification.
- Working to validate the model's performance and ensure clinical relevance and applicability.

Fake News Detection

📅 July 2022 – Aug 2022

Dedicated to combating misinformation in the digital age through data-driven insights.

- Experienced in leveraging Logistic Regression, Support Vector Machine (SVM), and Decision Tree models to develop robust fake news detection systems.
- Successfully implemented and tested these models on various datasets, achieving significant improvements in accuracy and precision in identifying fake news.

Smart Home Automation System

- Optimizes energy usage by adjusting appliances and systems based on real-time data from sensors
- Helps to reduce utility costs and environmental impact while maintaining comfort levels.

Smart Parking System

- Seamless and secure access for authorized users, no more ticket hassles.
- Real-time updates on slot availability, automatic alarms call for help when it detects fire, triggering water jets.

Smart Stick for Blind People

- Ultrasonic sensors cover front, left, and right directions, and enables efficient navigation for the visually impaired.
- Real-time obstacle identification for a safer journey, a solution that opens up new possibilities for independent mobility.

RESEARCH EXPERIENCE

CNN in Multi-Class Classification of Corneal Ulcer

📅 Jun 2023 – 2024

📍 Dhaka, Bangladesh

A deep learning project, which intersects AI and healthcare to revolutionize ophthalmology.

- Worked on image processing, multi-label classification and convolutional neural networks.
- Achieved an accuracy of 90

🔗 <https://github.com/SumitBr/Classification-of-Corneal-Ulcers>

EDUCATION

B.Sc. in Computer Science and Engineering

BRAC University

CGPA – 3.50

📅 May 2019 – April 2024

EXTRACURRICULARS

Durbar Foundation

Volunteer

📅 2017 – 2018

📍 Cumilla, Bangladesh

It is a non-profit organization that ensures the education of poor children free of charge.

- Raised funds to ensure educational equipment for the children.
- Played the role of a teacher.

SKILLS

Programming Language

Python

Java

C

C++

Tools

VS Code

Arduino

Raspberry Pi

Sensors

Git

Proteus

MS Office

Technical Skills

Deep Learning

Machine Learning

IoT

Circuit Design

PCB Layout

Electric Components

Product LifeCycle

Feature Analysis & Testing

SQL

OOP

Data Structure

Algorithm

Soft Skills

Project Management

Analytical

Self-Motivated

Quality Focused

Leadership

Communication

Team Player

People Management

Multi-tasking

LANGUAGES

English

Bangla