



# DEBMALYA SUR

Software Developer,  
Machine Learning  
Enthusiast, Mathematician.

## ACADEMIC HISTORY

Government College of Engineering &  
Ceramic Technology, Kolkata  
— B.Tech honors in Computer Science &  
Engineering  
Aug 2018 - MAY 2022  
9.83 CGPA till 4th semester

## CORE STRENGTHS

- Language: Python, C
- Web: Flask, Bootstrap, Streamlit
- Database: SQL, SQLite, Firebase
- Machine Learning: Numpy, Pandas, Matplotlib, Seaborn
- Strong Communication Skills

## CONTACT DETAILS:

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## ACHIEVEMENT:

- GATE AIR 2492 on 3rd Year.
- Secure 127th rank in SEAMO, 2017 from South East Asia region.

## PROJECTS

### • Full Scale Web Application

#### A. BAUD NEWS

[GITHUB](#) | [WEB VIEW](#)

- It's a user-specific News Web Application
- Build front-end with bootstrap and Flask
- Back-end logics are written in Python
- Used REST-APIs
- Used SMTP Server to sent verification mails

#### B. FRIENDSHIP METER

[GITHUB](#) | [WEB VIEW](#)

- It's a Web Game Application to measure the strength of friendship
- Front-end is made with bootstrap and Flask
- Back-end logics are written in Python
- Used REST-API to store generated result images

### • Desktop Application Designing

#### A. STUDENTS' REGISTRATION SYSTEM

[GITHUB](#) | [YOUTUBE VIDEO](#)

- It's a Desktop Application to register a student into a local database
- Build front-end with Tkinter
- Back-end logics are written in Python
- Used SQLite3 for local database management
- Registration Cards can also be generated using this application

#### B. COVID-19 DESKTOP APPLICATION

[GITHUB](#) | [YOUTUBE VIDEO](#)

- This desktop application was made to keep a track on COVID-19 cases
- I made front-end with the help of Tkinter
- Python is used to write back-end logics
- I did Web Scrapping to get data

### • Machine Learning

#### A. BREAST CANCER DETECTION

[GITHUB](#) | [WEB VIEW](#)

- This is a classification problem
- Got 96.49% accuracy by Random Forest Classification
- Made usable web application using streamlit

#### B. MRI & ALZHEIMERS CROSS SECTION ANALYSIS

[GITHUB](#)

- This is a machine learning Regression problem
- Got 0.145833 mean absolute error by XGBRegressor

### • Deep Learning

#### CAT OR DOG RECOGNIZER

[GITHUB](#) | [WEB VIEW](#) | [YOUTUBE VIDEO](#)

- This is a classification problem to classify cat and dog
- Made an sequential convolutional neural network (CNN)
- Made usable web application using streamlit

### • Discord Bot

#### HEART OF BOT

- It generates random images of user given size, transfers it into sketch
- It detects all edges of a picture, turns an image into black & white
- It translates sentences, gives top 5 news, generates QR code
- This is an invite able discord bot, named "Heart of Bot#0949"

### • Contributes in Framework

#### AKDSFRAMEWORK

[GITHUB](#)

- Contributes on Queue and Graph data structure