Debmalya Sur

MTech – Computer Science & Engineering – IIT (ISM), Dhanbad

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ORGANIZATIONAL PROJECTS

- **Fruit Freshness Measurement —**
  Flask | REST API | Regression | Classification   **GITHUB**

  - This was my BTech Final year project with a team of 4 members led by me
  - Here we developed classification & regression models
  - We have followed Iterative Enhancement Model
  - For classification task, we have developed our custom classification model where we have achieved an accuracy of 95% over the test data
  - For the regression task, we have used the ridge regressor and achieved the RMSE of 0.04

ACADEMIC HISTORY

Indian Institute of Technology (ISM), Dhanbad —
Master of Technology in Computer Science & Engineering
AUGUST 2022 - JUNE 2024 | Current CGPA 9.08

Government College of Engineering & Ceramic Technology, Kolkata — *Bachelor of Technology in Computer Science & Engineering*
AUGUST 2018 - JUNE 2022 | Graduated with CGPA 9.87

Bhatpara Amar Krishna Pathsala, Bhatpara
12th: APRIL 2017 - APRIL 2018 – **92.4%**
10th: MARCH 2015 – MARCH 2016 – **93%**

SKILLS

- **Technical:** C++, C, Python, SQL, DSA, API, Agile Development
- **Limited Exposures:** HTML, CSS, JS, Bootstrap, Flask, Django, MongoDB, SQLite3, Firebase

ACHIEVEMENTS

- I have written books on "C Programming Quick Start" and "The Blockchain Starter". My Books
- Silver Medalist in my BTech college, 2022
- GATE CS AIR 405 on 2022
- 4th in Theory of Computation NPTEL examination, 2021
- Secure 127th rank in SEAMO, 2017 from South East Asia region
- Gold Medalist in High Secondary examination in Barrackpore to Kalyani region, 2018
- Gold Medalist in Secondary examination among boys' in Barrackpore to Kalyani region, 2016

POSITIONS OF RESPONSIBILITY

- I was the leader of my BTech Final year project and successfully able to make the coordination between the members of my team and delivered the project before time
- Lead 3–4-member team in various Hackathons

PERSONAL PROJECTS

- **Baud News —** *User-Specific News Web App*
  Flask | REST API | SMTP Server   **WEB VIEW**

  - Developed login system where user can create their own accounts and on the basis of their preferences the news will be shown & the data is updatable
  - Used SMTP server to send verification emails
  - For news updation, I have used Cronjob which updates news JSON file in every 2 hours

- **DS Chat —** *Real Time Chat Web App*
  Django | SQLite3 | Bootstrap   **WEB VIEW**

  - Full Scale web application for real time chat application
  - Used Django for backend development, AJAX has been used for user-friendly non-reloadable interface
  - For in-server database I have used sqlite3

- **Students' Registration System —** *Desktop App*
  for college management usage
  Tkinter | SQLite3   **GITHUB**

  - In this desktop application, I have implemented CRUD operations where the data will be stored into the local database
  - One can also download or generate the registration card of a particular student or all of the class
  - The logics are written in python scripts, the front-end is developed using Tkinter module and the database is managed with SQLite3

- **Breast Cancer Detection —** *Classification*
  problem with web application
  Machine Learning | Streamlit   **GITHUB | WEB VIEW**

  - In this project I have developed a classification model which will predict the tissues are BENIGN or MALIGNANT on basis of certain data inputs
  - Got 96.49% accuracy by Random Forest Classifier
  - I have made a usable front-end with streamlit

- **Heart of Bot —** *A efficient bot for multi-purpose usage*
  Machine Learning | Deep Learning | Web Scrapping

  - In this project I have developed a discord bot with various functionalities, like generate random images, convert a given image into black and white image, fetching news etc.

CERTIFICATIONS

- **NPTEL:** Programming, Data Structures and Algorithms Using Python
- **NPTEL:** Theory of Computation
- **Amity University:** Machine Learning & Artificial Intelligence
- **Udemy:** Computer Networking & Its Applications in Public Safety
- **NPTEL:** Computer Networks and Internet Protocol