Sourav Saha

+8801846863334
H-263, Hajiganj, Chandpur
✉ sahasourav1170@gmail.com
 sahasourav17 | k sahasourav17 | in sourav-saha17

SUMMARY

Passionate individual with a solid educational foundation in computer science and an unbridled enthusiasm for the ever-evolving field of artificial intelligence and machine learning. Carrying the badge of an "Expert" on Kaggle, I've harnessed my passion to build proficiency in machine learning.I eagerly embrace opportunities to pioneer innovative solutions for real-world challenges.

EDUCATION

B.Sc in Computer Science and Engineering   **2018 - 2023**
Chittagong University of Engineering and Technology

Higher Secondary School Certificate   **2015 - 2017**
Notre Dame College

Science | GPA: 5.00 on a scale of 5

SKILLS

Languages	Python, JavaScript
Frameworks	Scikit-learn, Tensorflow, Keras, OpenCV, Nodejs ,React, Redux, MongoDB MySQL, Tailwind CSS, Material UI
Tools	Linux, Git, Jira

WORK EXPERIENCE

Software Engineer   **January 2023 - Present**
Spring Rain Private Ltd   *Dhaka*

- As an integral member of the R&D team, actively contributing to the development of an AI-driven automotive code review and suggestion system.
- Worked on a project management tool for Microsoft Teams.
- Performed web scrapping for Canada Choice - a canada based ecommerce site.

Industrial Trainee Software Engineer   **October 2022 - November 2022**
Brain Station 23 Ltd   *Dhaka*

- Learned fundamentals of JavaScript and build a multi-user todo-list application as an assignment.

ACHIEVEMENTS

2023	**13th**,	Shared Task 1: Violence Inciting Text Detection (VITD) - BLP Workshop EMNLP 2023
2023	**2nd**,	Multimodal Sentiment Analysis CLBLP 2023 (Task 1)
2022	**6th**,	ML Competition: CUET-ETE-Day
2023	**9th**,	Sentiment Analysis of Code-Mixed Text CLBLP 2023 (Task 2)
2023	**Onsite Participant**	Natural Language Processing Hackathon - BdOSN
2022	**Participant**,	Robi Datathon 2.0
2021	**Participant**,	NASA Space App Challenge
2018	**Participant**,	Techtronics 2018 Inter University Programming Contest

PROJECTS

Sarcasm Detection using Deep Fusion Model [GitHub]
- A hybrid deep learning late fusion model to detect sarcasm from Bangla text. Here, two deep learning models (BiLSTM, BiGRU) and two hybrid models(BiLSTM+CNN, BiGRU+CNN) are lately fused to detect whether a text is sarcastic or not.

Multimodal Sentiment Analysis on Bangali memes
- A multimodal model was created to examine the sentiments of multimodal data such as memes. This task was completed for the "Multimodal Sentiment Analysis, CLBLP 2023 (Task 1)" competition. To find the best model, various image and textual classifier models are combined and examined.

Students' Anxiety and Depression Prediction [GitHub]
- A web application made using streamlit to predict students' depression anxiety from text. Here, two deep learning models (BiLSTM, BiGRU) and statistical machine learning models are used.

Code-Mixed Sentiment Analysis
- To examine the sentiments of code-mixed text, a deep learning model was developed. This project was done for the competition "Sentiment Analysis of Code-Mixed Text," and we obtained an accuracy of **87.3%**.

Diabetic Retinopathy Analysis and Detection
- A deep learning model was created to automate the process of diagnosing and detecting diabetic retinopathy. In order to ensure the best performance, I've used a circular crop to effectively crop the region of interest (roi) and enhanced the images' lighting. I am currently tuning the hyperparameter of the model and had intended to write a paper on it.

Covid-19 Detection with Lung Segmentation using Deep Learning [GitHub]
- The U-net model is used first for lung segmentation, and then the Deep Learning model is used to determine whether or not a patient has covid-19.

SpringDMS [GitHub]
- This project's backend was built with Koa.js and MongoDB. An organization can keep track of the personal data and devices assigned to each employee here. Furthermore, this system can be used to manage any number of organizations.

TalkMate [GitHub]
- The user can ask questions and the backend will respond with the appropriate information. The backend uses the OpenAI API to respond to the query. This is still in development; the front-end will be written in React while the back-end is written in express.

ShopLedger [GitHub] [Live Demo]
- As part of our academic software engineering course, we developed ShopLedger, an all-in-one system for shop owners. In this project, we use Cypress to conduct e2e testing.

NoteFlare [GitHub] [Live Demo]
- An all-in-one note-taking application built using React that lets you use markdown to create ,edit and delete notes, tag them individually, and filter them based on tags.

CGPA Calculator for CUETians [GitHub]
- A script written in JavaScript that calculate CGPA from the students portal of CUET. It shows the cumulative CGPA in one go by aggregating all semester results.

LEADERSHIP EXPERIENCE

2022   **Assistant Organizing Secretary**, NDAC (Notredamian Association of CUET)
2022   **IT Secretary**, CUET CSE Fest 2022

I hereby declare that the above-mentioned information is correct to the best of my knowledge, and I accept responsibility for its accuracy.