# Prosenjit Chakraborty

Amchara Para, 2 No Gainda, Rajasthali Upazila Sadar, Rajasthali-4540, Rangamati, Bangladesh.
LinkedIn: **Prosenjit Chakraborty** || GitHub**: prosenjit-ch** || Portfolio**: Protfolio**
Email: prosenjitchakrabortyrmstu@gmail.com Contact No: +8801863259593

## Qualification

| | |
|---|---|
| **Degree:** | **Bachelor of Science (Engineering)** |
| Field of Study: | Computer Science and Engineering |
| Period: | 2017 – 2020 (Final Examination held in 2023) |
| Institution: | Rangamati Science and Technology University |
| Website: | https://rmstu.ac.bd |
| Thesis: | "A Hybrid Approach for Bengali Sentence Validation" || **Supervisor:** Juel Sikder Associate Professor, Department of Computer Science and Engineering, Rangamati Science and Technology University. |
| CGPA: | **3.58 Out of 4** |

## Research Assistant Experience

### Research Assistant

Rangamati Science and Technology University

- Collecting, analyzing, reviewing and summarizing research work
- Taking action to collect data, annotate it and analyze it.
- Using and Tuning state of art Machine Learning and Deep Learning algorithms
- Performing different testing processes for evaluation

## Publications

- **A Hybrid Approach for Bengali Sentence Validation**
  Artificial Intelligence Review || Q1 Journal

- **Bengali Handwritten Equation Solving System**
  Journal of King Saud University-Computer and Information Sciences || Q1 Journal

- **A Machine Learning Ensemble Approach For Understanding The Consumer's Degree of Satisfaction**
  EISBG 2024                                                                                   (ACCEPTED)

- **Deep Learning-Based Breast Cancer Diagnosis**
  Informatics in Medicine Unlocked || Q2 Journal                                    **(Under Review)**

- **Deforestation Detection in Rangamati Using A Customized UNet**
  Journal of Ecological Informatics || Q1 Journal                                     **(Under Review)**

## Key Projects

**Machine Learning-Based Language Classification of Multilingual Content Written in Bengali (Research Project)**
  **Supervisor:** Juel Sikder, Associate Professor, Department of Computer Science and Engineering, Rangamati Science and Technology University (RMSTU).
  **Period:** Aug 2022 – Jan 2023
  **Objective:** Classify the original language (such as Assamese, Chakma, Kokborok, Chittagonian, Sylheti and Bengali) of the content written using the Bengali alphabet.
  **Link: GitHub**

**Deforestation Detection System for Rangamati Hill Tracks (Research Project)**
  **Project Director:** Juel Sikder, Associate Professor, Department of Computer Science and Engineering, RMSTU
  **Period:** Jan 2023 – May 2023
  **Objective:** Detect and calculate the deforestation area from the given images of Chittagong Hill Tracks.
  **Link: GitHub**

**Automated Recommender System (Content Based, Collaborative and Hybrid)**
   **Objective:** Suggest personalized content or items to users based on their preferences, either by analyzing the characteristics of the items.
   **Link: GitHub, Demo**

**Information Extraction from Image Using Gemini**
   **Objective:** Information extraction from the image the invoice and medical prescriptions.
   **Link: GitHub, Demo**

**Interactive Map Dashboard for Detailed Location Analysis**
   **Objective:** An interactive map dashboard that allows users to explore and analyze specific areas by selecting square or rectangular regions on a high-resolution map.
   **Link: GitHub, Demo**

**Virtual Research Assistant for Research Paper Analysis**
   Objective: To create a Virtual Research Assistant that helps users easily upload research papers, ask questions, and receive accurate answers, leveraging Gemini Pro for efficient analysis and insights.
   **Link: GitHub, Demo**

**Bengali Handwritten Sentence Validation (Research Project)**
   **Supervisor:** Juel Sikder, Associate Professor, Department of Computer Science and Engineering, RMSTU
   **Period:** 2023 – Current
   **Objective:** Classify the Bengali handwritten sentences based on their correctness.

**Chakma Alphabet (Ajha Path) Recognition System (Research Project)**
   **Supervisor:** Juel Sikder, Associate Professor, Department of Computer Science and Engineering, RMSTU
   **Period:** Jan 2024 – Current
   **Objective:** Develop a functional Chakma alphabet recognition system.

## Technical Skills

- C
- Python
- Machine Learning
- Deep Learning
- Data Science
- Pytorch
- Tensorflow
- Image Processing
- Computer Vision
- NLP
- Numpy
- Pandas
- Scikit-Learn
- Git
- HTML
- CSS

## Extra-curricular activities, awards and achievements

- Former Joint Convener of RMSTU Computer Club
- RMSTU Computer Club Election Management at Rangamati Science and Technology University.
- Volunteer of RMSTU Computer Club
- Volunteer of Badhan, RMSTU Unit
- Winner of Gaming Competition in "RMSTU Technological Festival 2022"
- Scholarship from Chittagong Hill Tracks Development Board in 2020, 2021, 2022 and 2023
- Scholarship from Rangamati Science and Technology University in 2019, 2020, 2021, 2022 and 2023

## Seminar and Workshop

- Seminar on "Modern Trends For Research Methodology", Rangamati Science and Technology University, Rangamati-4500, Bangladesh, November 9, 2022
- Workshop on "Data mining with 'R' Machine Learning", Rangamati Science and Technology University, Rangamati-4500, Bangladesh, April 25, 2019

## References

**Juel Sikder** (Undergraduate Thesis Supervisor)
Associate Professor,
Department of Computer Science and Engineering, Rangamati Science and Technology University, Rangamati, Bangladesh
Phone: +8801833053416
Email: juelsikder48@gmail.com, juelsikder@rmstu.ac.bd

**Mithun Dutta**
Assistant Professor,
Department of Computer Science and Engineering, Rangamati Science and Technology University, Rangamati, Bangladesh
Phone: +8801672735373
Email: mithun@rmstu.ac.bd