# Pratik Maitra

## **Computer Science Student/Professional**

#### Contact

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GitHub - https://github.com/PratikMaitra Portfolio- <a href="https://pratikmaitra.github.io/">https://pratikmaitra.github.io/</a>

**Experience** 

2022/6-2022/12(6 months)

Research Assistant • Optimization/Healthcare NLP • University of Iowa

2021/10-2022/12(14 months)

Teaching Assistant • DBMS/UI/DS • University of Iowa

2017/12-2019/10(2 years)

IT/Systems Officer • Probationary Officer • State Bank of India

## **Education**

#### **University of Iowa**

3.70 CGPA

Master's in Computer Science 2021-23(ongoing) GRE - 321/TOEFL - 113

#### Jadavpur University

Bachelor's in Computer Science 2013-2017

3.41 CGPA (ECE evaluation) First Class (no backlogs)

#### Vivekananda Mission School

94.50 % (ISC) 96.60 %(ICSE)

(In the top 10 all India merit list)

### **Projects**

- I have developed an Electronic Medical Representative Software (EMR) as part of my software group project. The software used Express, React, NodeJS, and MySQL for development. The development model followed the Agile Double Iterative Hybrid process and made use of the MERN stack (MySQL, Express, React, Node).
- I have also showcased the performance of various ML models on projects related to stock price data/football match statistics/Boston housing dataset.
- I have familiarity with developing web pages using Google Maps API and Geocode. I have worked with automated scraping tools like Octaparse and Android VMs like Android Studio.

## **Key Skills**

Java/Python/JavaScript/HTML/CSS

C/C++(familiar) NodeJS/Express/React

> **MERN Stack** C-Profile/ Cython

GitHub/Gitlab/Version Control

3D Slicer/ITK Snap

**AWS** 

MySQL/MongoDB

Agile/Scrum driven Software Methodology

## Research

- I worked under Professor Subhadip Basu of Jadavpur University on the use of Shapley values for finding a game theoretic approach of the most influential node in a network and implemented the algorithm for the same.
- I am currently collaborating with Prof. Wang at the University of Iowa and Yixiang Xu of Berkley as a paid RA for optimization of python code. The initial optimization resulted in a reduction in the run time of processing a 5000-tweet database from 98 minutes to 28 minutes.
- I have worked briefly with Dr. Nadeem Ahmed on medical image processing which involved the manual segmentation of algorithm generated images of the thoracic cavity (particularly the rib cages) using ITK-Snap and 3D Slicer.