Pratik Maitra

Computer Science Researcher

Contact

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GitHub - https://github.com/PratikMaitra
Portfolio- https://pratikmaitra.github.io/

Education

Iowa State University
Doctor of Philosophy,Computer Science
2023-present

University of Iowa
3.76 CGPA
Master`s in Computer Science
2021-23

Jadavpur University
Bachelor`s in Computer Science
2013-2017
3.41 CGPA (ECE evaluation)

Vivekananda Mission School
94.50 % (ISC)
96.60 %(ICSE)
(In the top 10 all India merit list)

Key Skills

Java/Python/JavaScript/HTML/CSS
C/C++(familiar)
MySQL/MongoDB
SQL Stored Procedures/ORM
NodeJS/Express/React/MERN stack
PyTorch/TensorFlow
BioBERT/CliniBERT
C-Profile/ Async-Io/Multiprocessing
GitHub/Gitlab/Version Control
AWS EMR/YCSB/Hadoop/Spark
Agile/Scrum

Experience

2022/10-2023/01(3 months)
Remote Internship • PDF to CSV parser • Web page development
2022/6-2023/07(13 months)
Research Assistant • Optimization/NLP/Informatics • University of Iowa
2021/10-2023/05(19 months)
Teaching Assistant • DBMS/UI/DS/BAIS • University of Iowa
2017-2020(2 years)
IT Officer • State Bank of India

Research and Publications

- CAD2GRAPH: Automated Extraction of Spatial Graphs from Architectural Drawings – Pratik Maitra and others
- My research is focused on data-driven AI based NLP tools and their application on textual data especially biomedical text.
- I have collaborated with Professor Wang Tong, Professor Sena Chae, Professor Bijaya Adhikary at the University of Iowa on data-driven projects and research
- I have also mentored under Professor Subhadip Basu of Jadavpur University on using shapley values to enhance graph based social networks.

Projects

- Electronic Medical Representative web app using MERN stack following agile methodology.
- Projects involving comparison of ML models viz Linear Regression, SVM, KNN, LSTM on stock price predictions, football match statistics, Boston housing data-set and titanic dataset.
- Interactive pages using Google Maps API and Geocode and Web scraping and data extraction using Octaparse /Beautiful Soup.
- Cloud database benchmarking using YCSB and big data analytics of large-scale tweet dataset using Hadoop and cloud computing.
- Working PDF to CSV parser to extract tables as internship project.