Rohit Mujumdar

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Education

Georgia Institute of Technology, Atlanta, GA

Aug 2019 - May 2021

Master of Science, Computer Science, Specialization - Machine Learning (GPA: 4.0/4.0)

Coursework: NLP, Machine Learning, Data Science for Epidemiology, Web Search Text Mining, Graduate Algorithms

Vishwakarma Institute of Technology, Pune, India

July 2013 - May 2017

Bachelor of Technology, Computer Engineering (GPA: 3.98/4.0)

Coursework: Data Structures, Database Systems, Operating Systems, Distributed Computing, Business Analytics

Technical Skills

Programming Languages: Python, Java, SQL

Libraries: Pandas, NumPy, Scikit-learn, NLTK, HuggingFace, Prophet, NetworkX, SQLAlchemy, Flask, Matplotlib

Frameworks/Tools: PyTorch, IBM Watson, SpringBoot, Protege, Postman, Docker, Git

Work Experience

NCR Corporation - Software Engineer I (Atlanta, GA)

July 2021 - Present

- Optimized NCR's 'Order Finder' by expediting API requests; gain of atleast 30 ms (local environment)
- Resolved the issue of dangling profiles in NCR's 'Order Monitor' by implementing a profile deletion solution

IBM Research - Research Intern (Almaden Research Lab, CA)

June 2020 - Aug 2020

- $\bullet \ \ \text{Developed time series model to forecast resolution time of tickets; over $80\% \ \text{accuracy for more than 230,000 tickets}\\$
- Formulated model productionized into demand forecasting module; contributed towards savings of 30 million USD
- Communicated findings to business stakeholders and cross-functional teams; engaged with them to understand client needs
- Filed a patent around employee-task assignment and reskilling with the USPTO (first-author)

Froot Research - Data Scientist (Pune, India)

Sept 2018 - May 2019

- Built a real-time model to cluster incident tickets and to predict trouble trends for an operations analytics dashboard
- Formulated a novel binning technique by extending the k-means clustering algorithm; delivered POC to client Atos
- Designed metrics to ascertain cluster quality and to determine membership of tickets in the clusters

HSBC Software Development India - Software Engineer (Pune, India)

Aug 2017 - Aug 2018

• Built a Java application to interface with backend mainframe systems; reduced database query operations time by 50%

Publications

ASONAM'21, HawkEye: A Robust Reputation System for Community-based Misinformation Detection

Nov 2021

INFORMS'20, A Heuristic Approach To Compute Ticket Resolution Time (Best Poster - Honorable Mention) Nov 2020

Graduate Research

Computational Data Lab for the Web and Society, Georgia Tech (Prof. Srijan Kumar)

Jan 2021 - Presen

- Developed a reputation system for Birdwatch, Twitter's note-based community-driven feature to address misinformation
- Proposed solution more robust against manipulation; successful in influencing Birdwatch's note ranking system

Design and Intelligence Lab, Georgia Tech (Prof. Ashok Goel)

Aug 2019 - Aug 2020

- Experimented with transformer models to improve question classification of AI Teaching Assistant Jill Watson (JW)
- Achieved F1-score of 0.87 with the best performing model; performed qualitative analysis of classification results

Academic Projects

Do Scientific Ideas from more Prestigious Universities Spread Faster?

Sept 2020 - Nov 2020

- Simulated epidemiological models on Microsoft Academic Graph to investigate the imbalance in spread of ideas
- Formulated novel measures for the subjective concepts of institutional prestige & idea quality

Conference Paper Acceptance Prediction

Feb 2020 - April 2020

- Engineered novel custom features of research papers to assess factors driving their acceptability to conferences
- Implemented supervised learning models on AllenAI's PeerRead dataset; achieved best accuracy of 65%

Semantic Search Engine using a Dynamic Ontology

Jan 2016 - May 2017

- Built an ontology-based search engine; devised algorithm to mine Entity-Relation-Entity triplets from the web
- Optimized ontology querying and storage by devising a similarity-scoring algorithm to compare similar Relations

Leadership

NCR University Recruiting Champion, NCR Corporation

Head Teaching Assistant, AI, Ethics & Society, (Prof. Ayanna Howard)

July 2021 - Present Jan 2020 - May 2021

1 2020 - May 2021

Teaching Assistant, Knowledge-Based AI, (Prof. Ashok Goel)

Aug 2019 - Dec 2019