RAHUL AGARWAL

Minneapolis, MN • 612-438-6724 • agarw276@umn.edu • linkedin.com/in/rahula29• bvfst.github.io

EDUCATION

UNIVERSITY OF MINNESOTA, Minneapolis, MN | Carlson School of Management
Master of Science in Business Analytics | C*GPA:4.0* August 2022
Coursework: Predictive Analytics, Exploratory Data Analytics, Causal Inference, Big Data Analytics

BITS PILANI HYDERABAD CAMPUS, Hyderabad, Telangana, India
Bachelor of Engineering (Honors) – Electronics and Electrical Engineering August 2018
Coursework: Data Structures & Algorithms, Statistics, Optimization, Data Management Systems

EXPERIENCE

AI DOUBLEDOT | COGNIREL TECHNOLOGIES, Bengaluru, India
Building AI Solutions for business' data problems
Machine Learning Engineer December 2019 - June 2020
Ideated and Developed Java Error Classifier for Education Platform | *Python* | *Tensorflow* | *Spacy*

- Coordinated with business stakeholders and engineering teams, to develop an RNN based classifier, giving relevant prompts with an accuracy of 97% to help 50K+ students learn java language

Knowledge Graph-Based Question Answering Bot using NLP framework | Python | Neo4j | Tensorflow

- Prototyped scalable chatbots for education, matrimony and car trade businesses using web-scraping, semantic segmentation and RNNs, improving customer service for 3+ clients

INDUS VALLEY PARTNERS, Noida, India
Providing Technology products to Fund Managers managing $3.6T+ assets
Associate Software Engineer June 2018 - November 2019
Reconciliation Software Development | *C#* | *Javascript* | *React* | *SQL*

- Led data migration of multiple clients(150M+ records) from different platforms (SQL, MySQL) to single in-house SQL server for multi-tenant patch; saving storage costs for small business clients
- Programmed suggestion engine to help match reconciliations mismatches using support vector machines, adding fast resolution to reconciliations saving both support and clients time
- Leveraged structured event handling in Javascript, multithreading in C# and SQL query optimizations, enhancing performance of rendering the reconciliations dashboard by 40%
- Led a team of 3 which ideated surrogate architecture to combine repetitive month-end jobs into regular reconciliation process, saving database space by 75% and staff effort by 34%
- Spearheaded development of an in-house monitoring tool for multi-tenant clients, streamlining monitoring of reconciliation jobs for the platform teams, using React and C#

DATA SCIENCE PROJECTS

- Built an **ensemble model** consisting of CNN and LightGBM to predict customer transactions from kaggle competition data, matching top 50 scores with an AUC of 0.924
- Developed a **sentiment analysis** model for a workforce optimization company utilizing 57K voice calls data with XGBoost; demonstrating value of voice features along with textual parsing
- Presented insights into customers segments to an airline, supporting membership marketing campaigns, involving 3M+ PNR numbers by employing exploratory analysis using KPrototype clustering & PCA
- Researched song features such as valence, tempo and genre to quantify their impact on streaming numbers, performing **multivariate linear regression** analysis on 1M+ songs
- Performed **A/B testing** to measure the causal effect of online advertising for a video service provider, with respect to the frequency and the websites the ads were played on
- Used **difference in difference approach** to estimate effect of ads on number of clicks for a footwear retailer; created synthetic control using competitors brands

SKILLS

- **Tools:** Python(Pandas, Numpy, Scikit-Learn), R, C++, C#, SQL, JS, React, Neo4j
- **Techniques:** Machine Learning, NLP, Hypothesis Testing, A/B Testing, Data Structures & Algorithms