Rehan Mondal

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TECHNICAL SKILLS

Programming: Python, JAVA, C/C++, R, Matlab, MySQL/MS SQL, Go, JavaScript, HTML5, CSS3
Software Development and Data Visualization Tools: Git, Docker, Jira, PowerBI, Tableau
Design Tools: Adobe Photoshop, Adobe Lightroom, Final Cut Pro

WORK EXPERIENCE

Data Science Intern, The Coca Cola Company, Summer Internship   *Apr 2019 - Jul 2019*
- Extracted and consolidated sales data using SQL, collaborating with the data engineering team to ensure accuracy and emphasize data quality
- Used Python with pandas for sales data analysis, leveraged Matplotlib, Altair, and PowerBI for visualization, and applied statistical tests to evaluate sales performance factors

RESEARCH AND PROJECTS

Airline Ticket Management System, Academic Project, Software Construction   *Sep 2020 - Dec 2020*
- Developed a ticket management system using OOP principles and MVC pattern, enhanced with a GUI using JAVA Swing for an intuitive user experience and integrated robust error handling
- Employed Test Driven Development with JUnit to ensure system accuracy and reliability across various scenarios

Treasure Map Decoder, Academic Project, Data Structure and Algorithms   *Jan 2021 - Apr 2021*
- Developed a decoder in C++ that uses concepts of multiple search algorithms to combine multiple data structures to act like one to solve a map in the most effective and efficient way
- Reverse-engineered the maze-solving method and used steganography, a renowned computer science concept, to encode the solution into a map

Movie Revenue Predictor, Academic Project, Data Science   *Sep 2021 - Dec 2021*
- Developed a predictive model in R using tidyverse to forecast revenues based on factors like budget, genre, and production house, employing K-nn regression and transformation algorithms
- Leveraged train-test splits and cross-validation scores for model assessment and hyper-parameter optimization

Home Court Advantage, Academic Project, Data Science (Statistical Inference)   *Jun 2022 - Aug 2022*
- Analyzed the NBA Basketball dataset to assess home court advantage, utilizing tidyverse and repr for exploratory data analysis and feature visualization
- Employed hypothesis testing and confidence intervals to determine the presence of home court advantage for basketball teams

Oil Distribution Company, Academic Project, Relational Database   *Sep 2022 - Dec 2022*
- Developed a comprehensive database solution for an Oil Transportation Company to streamline oil management and transportation processes, from initial domain modelling to final application functionality
- Executed SQL operations via SQLplus and leveraged PHP to embed the database system, ensuring robust data management and operational integrity

Miami Housing Price Analysis, Academic Project, Data Science (Statistical Modelling)   *Jan 2023 - Apr 2023*
- Conducted an in-depth statistical analysis of Miami's housing market, leveraging a dataset of 13,932 single-family houses to identify key determinants of property prices using inferential methods like forward selection, t-tests, and F-tests
- Developed a predictive model that explains 68.95% of the price variance, emphasizing property area, proximity to landmarks, and structural quality as major contributors

Movie Revenue Using Custom Package, Academic Project, Data Science   *Jan 2023 - Apr 2023*
- Developed a custom R package for EDA, data visualization, and statistical modelling; thoroughly tested with the testthat library and maintained code quality via GitHub actions
- Implemented CI/CD pipelines using GitHub actions for efficient code deployment and continuous integration

EDUCATION

Bachelor of Science, University of British Columbia, Vancouver, BC, Canada   *Sep 2019 - Dec 2023*
- Specialization: Mathematics and Data Science

High School, American International School Dhaka, Bangladesh   *Jul 2017 - May 2019*
- International Baccalaureate (IB)