Saim Zafar

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Skills

- **Languages**: Python, R, SQL, C#, Java, JavaScript, DAX
- **Frameworks**: MongoDB, Apache Kafka, MySQL, SQLite, Microsoft SQL Server
- **Tools**: Power BI, Power Automate, Docker, Kubernetes, Snowflake, JIRA, Jenkins, Confluence
- Proficient in agile methodologies and software design life cycle

Education

University of Waterloo - Bachelor of Mathematics Honours — Expected Fall 2024

- Pursuing a Double Major in **Computational Mathematics and Statistics**
- Awarded President's Scholarship of Distinction and President's Upper-Year Awards for academic performance

Professional Experience

Data Analyst – *Intact Labs, Toronto* — Winter 2023

- Developed a code analysis pipeline to detect vulnerabilities and increase overall test coverage to **90%**
- Assisted QA Lead in developing and deploying a testing strategy to evaluate a newly designed insurance model
- Documented legacy ETL pipeline and MongoDB document stores for improved productivity and knowledge transfer

Business Analyst – *RLB LLP, Guelph* — Spring 2022

- Created multiple HR dashboards to enhance hiring pipeline using Power Automate, Python, and Power BI
- Helped reduce the time between each interview round to about **20%** and overall time by **50%**
- Implemented Box Cloud DMS and established data governing policy to prevent accidental data leaks

Projects

Search Engine – *Python, SQL, Dynamic Programming, Linear Algebra* — Jan 2023

- Built a web crawler that searches the internet for a given input under some constraint and stores the results in SQLite
- Utilized the Page Rank algorithm to perform a probability randomization experiment on the web pages and rank them

Twitter Analysis – *R, Hypothesis Testing, Confidence Interval, Linear Regression* — Dec 2022

- Evaluated tweet timing, celebrity popularity, and tweet quality to drive higher user engagement
- Optimized social media engagement and enhanced tweet interaction through variable combination testing

Tic Tac Toe – *Python, Dynamic Programming, Object Oriented Programming* — Feb 2023

- Created a Tic Tac Toe game UI in the terminal using Python and object-oriented programming.
- Implemented the min-max algorithm to simulate all the possible combinations and compute the best move
- Developed a simulation to test the effectiveness of the program using a random number generator

Certifications

Introduction to Machine Learning – *Kaggle* – ***Certificate*** — May 2023

- Gained fundamental knowledge in ML, including applied stats, linear algebra, and supervised learning algorithms
- Developed proficiency in ML tools such as PyTorch, NumPy, SciKit, Sklearn, and Pandas
- Built a random forest model for predicting house prices with **99.763%** accuracy on test data

Specialization in Python – *Coursera, University of Michigan* – ***Certificate*** — Oct 2021

- Acquired strong fundamentals in Python, including strings, collections, iterables, modularity, and objects
- Built strong fundamentals in core software concepts such as data structures, APIs, and databases
- Developed a web crawler to parse email data and visualize word frequency in a word cloud

Algorithm Toolbox – *Coursera, University of California San Diego* – ***Certificate*** — Jan 2022

- Studied multiple new algorithms and computed their time and space complexity
- Optimized inefficient programs using new techniques and stress-tested them to ensure correctness and efficiency