

# Saim Zafar

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## Skills

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

## Professional Experience

### Business Analyst – [Intact Labs, Toronto](#)

Jan 2023 - Apr 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 developed insurance calculation model
- Documented legacy ETL pipeline and MongoDB document stores for improved productivity and knowledge transfer

### Business Analyst – [RLB LLP, Guelph](#)

May 2022 - Sep 2022

- Created business dashboards and optimized time and data efficiency by **48%** with a new SQL script
- Developed HR dashboard to enhance hiring performance by **55%** using Power Automate, Python, and Power BI
- Implemented Box Cloud DMS and established data governing policy to prevent accidental data leaks

## Projects

### [Undeatable 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

### [Mini 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

## 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 **94.59%** 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

## Education

### University of Waterloo - Bachelor of Mathematics Honours, **GPA - 3.58**

Jan 2021 - Present

- Pursuing a Double Major in Computational Mathematics and Statistics
- Awarded [President's Scholarship of Distinction](#) and [President's Upper-Year Awards](#)

## Volunteer Experience

- [Black Tie Orientation Leader \(2022\)](#) - Organized Math Orientation for over 200 students in Fall 2022