

Syed Rafae Hashmi

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EDUCATION

Wilfrid Laurier University

Honours Bachelor of Science, Computer Science Co-op – Big Data Systems and Data Analytics Minor

Waterloo, ON

Sep 2022 - Aug 2026

TECHNICAL SKILLS

Languages: C, C++, CSS, HTML, Java, JavaScript, LaTeX, Python, R, SQL, Visual Basic for Applications (VBA)

Frameworks: Angular, Bootstrap, Next.js, Node.js, React Native, TensorFlow

Libraries: matplotlib, NumPy, PyTorch, Pandas, React.js, seaborn, SciKit Learn, Tidyverse

Cloud/Databases: AWS, Azure, Firebase, MongoDB, MySQL

Technologies: alteryx, AutoCAD, Confluence, Eclipse, Fusion 360, Git, GitHub, Jira, Jupyter, Linux, Microsoft Office, Netlify, Power Bi, RStudio, SOLIDWORKS, Tableau, Visual Studio, Windows

Language Fluency: English, French

WORK EXPERIENCE

80eight | Jr. Data Analyst - Intern

May 2023 - Aug 2023

- Implemented **automated** data extraction processes using **SQL** and **Python**, saving the data analytics and financial resources team **10+ hours** weekly and facilitating efficient data modeling to reduce errors by **30%**.
- Improved efficiency through query optimization and normalization, reducing data retrieval times by **5 minutes** per query and enhancing data visualization accuracy.
- Cleaned and pre-processed raw sensitive financial data using **alteryx AI** analysis software, ensuring **99%** accuracy across **1,000,000+** records, which improved the quality of data models and visual reports.

Brickworks Academy | LEGO Robotics Instructor

Jul 2022 - Sep 2022

- Developed software curriculum, for a class of **30+** students, increasing student engagement by **25%**.
- Taught coding practices using EV3 Software, enhancing student proficiency, achieving **5+** competition wins.
- Managed a budget of **\$5000** for materials and equipment, achieving a **95%** utilization rate.

PROJECTS

A Knight's Tour Hamiltonian Path Problem

JavaScript, React, HTML, CSS

- Developed **3 distinct** methods to solve the Knight's Tour problem, achieving an accuracy of **100%** across **500+** test cases, and maintained a **user-friendly** interface
- Implemented a **backtracking** algorithm and integrated a **heuristic** algorithm using **Warnsdorff's Rule**, reducing average solution time and demonstrating efficiency on larger boards.
- Produced a **neural network model** satisfying **100%** of cases, showcasing advanced machine learning capabilities.

Bulldozer Price Pro Linear Price Regression Model

Python, Jupyter Notebook

- Created a **machine learning model** to predict future trends of Bulldozer prices using **regression techniques**.
- Improved algorithm performance by implementing a confusion matrix, increasing accuracy from **70.4%** to **95.8%**.
- Cleaned and sorted values from a dataset of **400000+** fields to evaluate future pricing using tools like **numpy**, **pandas**, **seaborn**, and **scikit-learn** and regression graphs.

SudokuSolve AI Constraint Satisfaction Problem

Python

- Improved algorithm performance using the **AC3 algorithm**, now capable of solving puzzles in **~1 seconds** on average compared to **2+** hours manually.
- Used **3+** dictionaries and **80+** values, optimizing solution efficiency.
- Validated solver effectiveness through back testing across various difficulty levels.

LEADERSHIP EXPERIENCE

HawkHacks | Event & Logistics Coordinator

Sep 2023 - Apr 2024

- Managed **\$200,000** in prizes by implementing strategic planning, lead generation, and cold outreach strategies, resulting in **35** partnerships for one of Canada's largest Hackathons with over **900** participants.
- Managed event budgets, ensuring optimal resource allocation and reducing costs by **\$20,000+**.
- Implemented effective relationship management strategies, fostering key partnerships with industry leaders in Crypto/Web3 such as Near Toronto, Avalanche, and Metis, along with the University of Waterloo Blockchain Club