Syed Rafae Hashmi

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EDUCATION

Wilfrid Laurier University	Waterloo, ON
Honours Bachelor of Science, Computer Science Co-op, Minor in Data Analytics	Sep 2022 - Aug 2026

TECHNICAL SKILLS

Languages: C/C++, CSS, HTML, Java, JavaScript, LaTeX, PHP, Python, R, SQL, Visual Basic
Frameworks/Libraries: Angular, Bootstrap, matplotlib, Next.js, Node.js, NumPy, Pandas, PyTorch, React Native, React.js, SciKit Learn, seaborn, TensorFlow, Tidyverse
Developer Tools: AWS, alteryx, Azure, Confluence, Eclipse, Firebase, Git, Jira, Jupyter Notebook, Linux, MongoDB, MS Office, MySQL, Netlify, Power Bi, RStudio, Tableau, Vercel, Visual Studio, VSCode

WORK EXPERIENCE

Data Analyst Intern | *80eight - Toronto, ON* — 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 reducing errors by **30%**
- Optimized queries, reducing data retrieval times by **5 minutes** per query and refining data **visualization** accuracy
- Cleaned and pre-processed raw financial data using **alteryx AI** software, ensuring **90%** accuracy across **1,000,000+** records

Robotics Instructor | *BrickWorks Academy - Toronto, ON* — Jul 2022 - Sep 2022
- Developed software curriculum, for a class of **30+** students, increasing student enrollment 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 | JavaScript, React, HTML, CSS — Jun 2024
- Designed a React application to solve the Knight's Tour problem, leveraging advanced backtracking & heuristic algorithms to achieve **100%** accuracy across **500+** test case, enhancing algorithmic problem-solving skills.
- Developed comprehensive unit tests using Jest and React Testing Library, ensuring consistent application reliability.
- Utilized a **neural network** model, achieving **100%** case satisfaction, showcasing advanced **machine learning** capabilities

Bulldozer Price Pro | Python, Jupyter Notebook, NumPy, Pandas, Seaborn, Sci-Kit Learn — May 2024
- Achieved **15%** improvement in model accuracy by implementing **feature engineering** and **hyperparameter tuning** techniques on a **linear regression model** for predicting bulldozer prices.
- **Engineered** a scalable machine learning pipeline using **scikit-learn** and **Pandas**, automating data cleaning and feature engineering processes, reducing manual errors and saving significant time
- Cleaned, sorted and pre-processed a dataset of **400,000+** fields, applying data **visualization** and **modeling** to provide clear and actionable insights to stakeholders

SudokuSolve AI | Python — May 2024
- Engineered a high-performance **CSP** solver by using the **AC3 algorithm**, achieving an improvement in solving efficiency through advanced **domain revision** and constraint handling techniques, reducing solving time from **1 hour** to ~**1 second**
- **Developed** an intuitive and interactive GUI using **Pygame**, facilitating seamless user interactions and providing real-time visual feedback for a Sudoku solver application.
- **Optimized** data structures for variable management, to reduce memory overhead by **20%** and improve system performance

LEADERSHIP EXPERIENCE

HawkHacks | *Event & Logistics Coordinator* — Sep 2023 - Apr 2024
- Managed **$200,000** in prizes, forming **35** partnerships for one of Canada's largest Hackathons with **900+** participants
- Controlled event budgets, ensuring optimal resource allocation and reducing costs by **$20,000+**

CERTIFICATIONS

Database SQL Certified Associate | *Oracle University* — Expected Completion: Aug 2024
- Gained hands-on experience with Oracle Database functions and expressions, managing large datasets using **SQL-Loader**, and implementing features like flashback queries and regular expressions
- Learned to control user access and ensure data security, applying **Data Definition Language (DDL)** and **Data Control Language (DCL)** commands to manage permissions and maintain database integrity