

Jacob Trombley

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Summary of Qualifications

- 4+ years of analytics experience, with proficiency in data management, exploratory data analysis, and visualization
- Proficient in Python, SQL, R, and Microsoft Excel with experience in working with Azure, Tableau, and Power BI
- Experience in leveraging statistical analysis and machine learning to drive continuous improvement initiatives
- Knowledge of cloud, data warehousing, and big data technologies, with hands-on experience in foundational aspects
- Capable of translating business requirements into analytical specifications and presenting findings to executives
- Detail-oriented, results-driven individual with a strong work ethic, quick learning ability, and time-management skills
- Excellent written and oral communication skills demonstrated through engaging reports and presentations

Education

Master of Engineering, Industrial Engineering (Analytics and Machine Learning)

Currently Pursuing

The University of Toronto

- Relevant coursework: Foundations of Data Analytics and Machine Learning, Cloud-Based Data Analytics

Bachelor of Science, Honours Integrated Science

Sep. 2018 - Apr. 2023

The University of Western Ontario

- GPA: 4.0; Dean's Honour List all years; graduated with distinction
- Awards: Scholarship of Distinction, Andrew and Sarah Hamilton Scholarship, First Place Thesis Presentation
- Relevant coursework: Data Analysis, Big Data and Mathematical Modelling, Computer Science, Statistics and Statistical Analysis, Project Management, Calculus I and II, Physics I and II

Professional Experience

Data Analyst, Agriculture and Agri-Food Canada

Sep. 2022 - Apr. 2023

- Wrote SQL queries to enable efficient manipulation of large datasets while searching and aggregating data
- Utilized strong analytical skills to design tests and hypotheses that influenced product development strategies
- Troubleshooted technical issues with an entrepreneurial mindset providing industry-scalable solutions to executives
- Coordinated and executed multiple projects, ensuring seamless project coordination throughout the process

Research and Development, Sanofi Canada

May 2021 - Sep. 2022

- Applied mechanistic modelling to optimize processes, resulting in efficiency improvements and reduced cost
- Utilized analytical techniques and conducted extensive data analysis to visualize and present data effectively
- Employed statistical modelling and analysis to interpret complex datasets against key performance indicators
- Informed the department of advancements by researching changing facilities technology and market trends

Project-based Experience

Machine Learning, Stanford Online

Jun. 2023 - Jul. 2023

- Developed and implemented regression models to predict continuous variables, achieving accurate predictions
- Built classification models to solve problems, effectively distinguishing classes and optimizing performance
- Utilized TensorFlow and PyTorch to train neural networks for image recognition and classification problems
- Applied feature engineering techniques to enhance model accuracy and improve prediction outcomes
- Built machine learning algorithms from scratch in Python, gaining valuable insights into troubleshooting errors

Data Analyst, Udacity Nanodegree Program

Apr. 2023 - Jun. 2023

- Leveraged advanced statistical techniques and machine learning models to complete real world data analysis on topics such as market trends, customer behaviour, and business performance using data from various sources
- Conducted exploratory data analysis to identify patterns and trends, leading to actionable business insights
- Successfully gathered, cleaned, and prepared datasets for analysis, ensuring data quality and accuracy
- Created informative exploratory and explanatory data visualizations using Matplotlib and Seaborn libraries

Project Management, The City of London

Jan. 2021 - Apr. 2021

- Initiated, planned, and executed a project for the City of London to improve household energy efficiencies
- Utilized Gantt charts, cost-benefit analysis, and work breakdown structures to assess the project feasibility
- Tracked all project deliverables and estimated budgets using Microsoft Project management software
- Demonstrated project management, team mentorship, and leadership qualities while guiding team members

Big Data and Mathematical Modelling, Western University

Jan. 2020 - Apr. 2020

- Utilized diverse libraries to extract insights and generate impactful visualizations for reports and presentations
- Performed optimization, Monte Carlo simulation, regression analysis, and cross-validation
- Created machine learning models based on A/B test results from an e-commerce website with scikit-learn

Computer Science and Statistics, Western University

Jan. 2019 - Apr. 2020

- Developed Python scripts and programs, employing various data structures and algorithms to solve problems
- Understood and applied a variety of methodologies to solve problems while handling errors and exceptions
- Demonstrated expertise in data science disciplines such as hypothesis testing and statistical modelling
- Conducted data analysis, statistical modelling, and data visualization with various packages and tools in Python and R, showing proficiency in data manipulation and analysis to support evidence-based decision making

Volunteer Experience

Mentorship and Leadership, Western University

Sep. 2020 - Apr. 2023

- Planned, organized, and led a program-wide event by leveraging techniques in both cost and time management
- Managed operating costs while tracking and optimizing spending efficiency to ensure events stayed on budget

Ambassador, Medical Case Competition, Western University Branch

Sep. 2020 - May 2022

Certifications

Supervised Machine Learning: Regression and Classification, Stanford Online

Jul. 2023

Databricks Lakehouse Fundamentals, Databricks

Jul. 2023

Data Analyst, Udacity

Jun. 2023

Publications

1. Li, A.S., Biebinger, L., Trombley, J., Cheung, S., Yuan, T. (2022) Mechanistic modelling for a hydrophobic-interaction chromatography process. *Bioprocess International*, 20: 10-17.

Additional Work Experience

Picker/Packer, Turf Care Products Canada Ltd.

Jul. 2016 - Sep. 2018

Maintenance Crew Member, Silver Lakes Golf and Country Club

Apr. 2016 - Jul. 2016

Dishwasher, Kloster's Butcher Shop

Apr. 2015 - May 2016

Tutor, Tiny Treasures Daycare Centre

Jun. 2013 - Dec. 2017