Brendon Phillips

LinkedIn | GitHub | Publications

Location: Toronto ON M5A 3X2
Email: brendoncphillips@gmail.com | Mobile: 437-268-1484

DATA SCIENTIST, ANALYST

Over 7 years of experience in **data science**, **modelling** and **analytics** of big data with **Python, R, SQL** and **C++**.
Flexible developer and analyst proficient with data **visualization**, dashboards and **machine learning**.

TECHNICAL SKILLS

Python	:	BeautifulSoup, matplotlib, geopandas, nltk, numpy, pandas, prophet, scikit-learn, seaborn, statsmodels, tensorflow, word2vec
R	:	comprehenr, data.table, dplyr, ggplot2, knitr, orca, plotly, quantreg, reshape2, shiny, stringr, trend
SQL	:	MySQL, BigQuery, DuckDB, PostgreSQL, dbt, ETL/ELT, PL/SQL
Other tools	:	C/C++, Rust, Shell scripting, Fortran, MATLAB, regex, XML, SAS, MS Excel, GCP, Linux CLI
Productivity	:	Microsoft Powerpoint, Microsoft Word, Google Slides, Google Docs, LaTeX, Tableau

PROFESSIONAL EXPERIENCE

Data Analyst 06/2023-Present
Hospital for Sick Children *Hybrid - Toronto ON, Canada*

Working on a research team to clean and repair medical trial data for statistical analysis and optimize the code review process.

Senior Software Engineer 02/2022 – 02/2023
Liquid Analytics *Remote – Toronto ON, Canada*

Designed and delivered optimized data mining algorithms that:

- assemble complex SQL queries and use NLP and other techniques in Python to analyse and recover features from a large volume of unstructured data,
- achieve average parsing times of less than 1 millisecond per entity profile over 97% of data without external API calls,
- score the degrees of similarity between entity profiles using Python and upload scores to BigQuery.

Wrote documentation, status reports and updates, and gave regular non-technical presentations to stakeholders.

Postdoctoral Fellow (contract) 05/2021 – 02/2022
York University *Hybrid - York, ON, Canada*

Modelled and simulated disease transmission dynamics, and evaluated and analysed the effectiveness of interventions including vaccination with behavioural and social responses with regression and numerical analysis.

Postdoctoral Fellow (contract) 01/2021 – 04/2021
University of British Columbia *Remote - Vancouver BC, Canada*

Co-developed software with ApexRMS to use their SyncroSim application to compare and chain together COVID-19 models written in R, Python and C#.

Researcher 09/2015 – 11/2020
University of Waterloo *On-site - Waterloo ON, Canada*

Proposed new techniques useful for quantitative analysis and prediction of epidemics and public health crises in a computational infectious disease model (with social media dynamics) using time series analysis, machine learning (NLP, regression, cluster analysis, etc) and extensive statistical and data analysis.

ADDITIONAL TRAINING

- **Google Data Analytics Professional Certificate** 04/2023

EDUCATION

Ph.D. Applied Mathematics Waterloo ON, Canada
University of Waterloo *09/2015 – 12/2020*

M.Sc. Mathematics London ON, Canada
Western University *09/2014 – 08/2015*

B.Sc. Mathematics Cave Hill, St. Michael, Barbados
University of the West Indies *09/2011 – 07/2014*