

Joshua Loong

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REFERENCES

Available upon
request

EXPERIENCE

Data Analyst, Strategic Insights Unit, Destination Ontario

Toronto, ON – June, 2018 - Present

- Work with SIU team on a pilot project constructing an internal database and visualization tools to house marketing and financial data
- Lead an organization-wide strategic review in data and reporting practices to centralize data storage, provide better goal-oriented analysis, and build analytic capacity through training
- Develop analysis on marketing campaign performance for tourism partners

Data Scientist, Digital Team, Ontario Liberal Party

Toronto, ON – January, 2018 - June, 2018

- The main data scientist for the Digital team in the party's 2018 re-election campaign
- Construct models to find insights into the performance of digital media content, such as analyzing KPIs against features such as photo colours hues and objects, or text content
- Build learnings into internal web apps to assist teams using Flask and SQLite
- Create a machine learning pipeline to analyze political conversations for bot activity
- Develop spatial tools for staff to visualize voter data using Google Fusion Tables and CARTO

Tech Development Lead, Open Democracy Project

Toronto, ON — June, 2017 - Present

- Lead the tech team for the non-profit's flagship product, Democracy Kit, a platform to give resources and training for people running for municipal office for the first time
- Building the organization's online course platform on top of the Open edX codebase using a combination of React and Django

Research Analyst Intern, Ministry of Advanced Education and Skills Development

Toronto, ON – May, 2017 – August, 2017

- Complete and present statistical analysis to influence policy development concerning the government's job training and apprenticeship programs using Python, Excel and Tableau
- Design web apps and tools to make the ministry's open data initiatives more accessible to everyday citizens, in addition to internal research use, using Node JS, MySQL, and Plotly

Marketing Data Analyst, Cabinet Office, Government of Ontario

Toronto, ON – January, 2016 – December, 2016

- Conduct numerous research projects using government social media data to create tools and best practices for the Cabinet Office team using Excel and VBA
- Help strategize, develop and curate content for the Ontario Government's digital marketing initiatives as part of the team and as part of a government-wide innovation group

EDUCATION

Candidate for Honours Bachelors of Science and Business

University of Waterloo, Waterloo, ON — Sept, 2014 – December, 2019

- The degree provides a strong background in scientific research and analytic skills overlaid with a business focused mindset including studies in biostatistics and econometrics
- Relevant courses include: ECON 221 (Statistics for Economists), MATH 127 & 128 (Calculus I & II for Sciences), & SCBUS 323 (Technology Development)

Python for Machine Learning and Data Science Bootcamp

Udemy — August, 2017

- In-depth training into the use of Python for statistical and data analysis including a variety of machine learning algorithms, plotting and regression analysis, and more

HOBBY PROJECTS

- **sg2im Demo (In Progress)** - Developing a React/Flask web app allowing users to build photorealistic images from scene graphs using Google's sg2im neural network
- **Chow Test Module** - Built first Python package for calculating Chow tests to measure structural breaks in time series data
- **Colour Palette Extractor** - Wrote a web app to extract colour hues from uploaded photos

TECHNICAL SKILLS

- Languages such as Python, Javascript, VBA, Bash
- Frameworks like Django, Flask, React, Node
- Databases like SQLite, MySQL, MongoDB, Microsoft Access, Fusion Tables
- Libraries such as sci-kit learn, gensim, scipy, statsmodels, Plotly, D3.js, Selenium
- BI and spatial tools like Tableau, Power BI, Mapbox, CARTO, and QGIS