



Josh Whelan

CHOICE MODELING AND DATA ANALYTICS

Toronto, ON

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I like to break down problems to build pragmatic solutions. Coming from a background of economics and mathematics, I enjoy the challenge of creating well designed experiments and models to test hypotheses and produce informative analytics tools to forecast possibilities.

Skills

DATA SCIENCE

- Discrete choice models, data wrangling, hierarchical Bayesian modeling, regression analysis, process automation, dynamic reports, survey analysis, classification

LANGUAGES & APPLICATIONS

- Expertise with R: tidyverse and tidy data principles, Shiny applications, Rmarkdown reports
 - Extensive experience in market research applications: MaxDiff, Conjoint, Virtual Shopping exercises
- Expertise with MS Excel: VBA, share of preference and volumetric simulators
- Experience with Python, SQL, AWS

Experience

Dig Insights

Toronto, ON

CHOICE MODELING AND DATA ANALYTICS MANAGER

May 2018 - Present

- Modeling and analyzing consumer preferences through hierarchical Bayes estimation with both R and Sawtooth Software
- Creating informative simulators in Excel and R from random utility maximization models to forecast preferences towards new consumer products or concepts
- Creating and testing experimental designs for quantitative survey methods in a variety of frameworks including MaxDiff, choice-based conjoint (CBC), and full virtual market discrete choice
- Collaborating with government agencies and nonprofit organizations to lead quantitative research and conduct evaluation of programs in social return of investment contexts
- Managing and mentoring junior team members and planning around multiple agile projects with competing deadlines
- Building tools to reduce outsourcing of manual tasks or to automate processes and enable research teams to work more independently, save time, and work more efficiently
- Developing and testing new methodologies for choice modeling projects

McMaster University

Hamilton, ON

RESEARCH ASSISTANT

Sep 2015 - Sep 2018

- Collaborated with professors in research projects, writing on findings and using Stata and MS Excel to clean and analyze data for empirical studies
- Cleaned and restructured datasets secured in the Public Economics Data Analysis Laboratory to generate reports on confidential data for clients

Thomson Reuters

Toronto, ON

ONLINE PRODUCT ANALYST

Aug 2014 - Sep 2015

- Communicated and coordinated between management and development teams, ensuring teams were aligned on goals and capabilities
- Performed QA testing for active and upcoming online legal research products and prioritizing bugs for the development team

Catlin Canada

Toronto, ON

JUNIOR BUSINESS ANALYST

Dec 2013 - Aug 2014

- Developed relational database solutions with Filemaker Pro and SQL to identify and analyze trends and opportunities
- Designed, tested, and debugged user interfaces for in-house databases and reports

Education

York University

Toronto, ON

MA, ECONOMICS

2012 - 2013

Memorial University of Newfoundland

St. John's, NL

BSc JOINT HONOURS, ECONOMICS & APPLIED MATHEMATICS

2007 - 2012