

# David Dai

DATA SCIENTIST

+1 647-500-5055 | davidwh.dai@gmail.com | www.daviddai.ca | dwhdai | dwhdai

## Technical Skills

### PROGRAMMING PROFICIENCIES

- R (advanced), Python (literate)
- HTML/CSS (intermediate), Javascript (intermediate)

### STATISTICAL AND MACHINE LEARNING PROFICIENCIES

- Strongly proficient in statistical modeling, including analysis of continuous; discrete; non-normal; cluster-correlated; longitudinal; time-to-event (survival analysis); and time series data
- Broadly proficient in contemporary machine learning algorithms, including xgboost (advanced), PCA (advanced), deep learning (basic), and natural language processing (basic)
- Strongly proficient in experimental design, model validation, resampling methods, and model evaluation

### MISCELLANEOUS PROFICIENCIES

- Git (intermediate)
- Docker (intermediate), Kubernetes (basic)
- Comfortable with Unix environment

## Recent Experience

### LKS-CHART - St. Michael's Hospital

Toronto, Canada

SENIOR DATA SCIENTIST

January 2020 - Present

- Developed team-wide data science workflows to promote reproducibility and stability of data science applications.
- Developed and deployed machine learning models and decision algorithms in a hospital setting to improve various operational inefficiencies and patient outcomes.

### LKS-CHART - St. Michael's Hospital

Toronto, Canada

JUNIOR DATA SCIENTIST

September 2018 - January 2020

- Developed a fully-integrated web application with built-in optimization modeling that is used by the St. Michael's Hospital Emergency Department for daily nurse assignment.

### Applied Health Research Centre - St. Michael's Hospital

Toronto, Canada

STATISTICIAN

July 2016 - September 2018

- Conducted statistical analysis and consulted on the design of international, multi-center clinical trials, with notable publications in the New England Journal of Medicine and Ophthalmology.
- Lead statistician of large observational registry of pediatric subjects, with notable publications in The Journal of Pediatrics and The American Journal of Clinical Nutrition.

### St. Joseph's Healthcare Hamilton

Hamilton, Canada

STATISTICAL ANALYST

June 2015 - July 2016

- Lead statistical analyst of a large observational cohort, with notable publications in The Journal of Allergy and Clinical Immunology and The European Respiratory Journal.

## Education

### University of Toronto

Toronto, Canada

MSC, BIOSTATISTICS (GPA 4.0/4.0)

2015

### University of Toronto

Toronto, Canada

HBSC, WITH HIGH DISTINCTION (GPA 3.8/4.0)

2014