David Dai
DATA SCIENTIST

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Technical Skills

PROGRAMMING LANGUAGES

- R, Python, SQL
- HTML, CSS, Javascript

ANALYTICAL PROFICIENCIES

- Highly proficient in applied statistical modeling and machine learning algorithms
- Highly proficient in data wrangling using the R Tidyverse
- Advanced R Shiny developer and R package developer

COMMONLY USED TOOLS

- Git, Docker, Unix

Recent Experience

Senior Data Scientist   *Toronto, Canada*
LKS-CHART - ST. MICHAEL'S HOSPITAL   *January 2020 - Present*

- Released an internal R package for automating common production data science tasks.
- Deployed 3 web applications, including a COVID-19 dashboard to help hospital leadership members manage patient flow and resource allocation.
- Led team journal club and 'three tips' sessions for disseminating useful information amongst the team.

Junior Data Scientist   *Toronto, Canada*
LKS-CHART - ST. MICHAEL'S HOSPITAL   *September 2018 - January 2020*

- Deployed a web application with fully-integrated optimization modeling used at the St. Michael's Hospital Emergency Department for daily nurse assignment. Reduced task time from 2.5 hours daily to 15 minutes, and improved KPI metric by 5 times the baseline.
- Developed an automated algorithm that sifts through large amounts of data to identify patients eligible for targeted antimicrobial conversion therapy. Enabled new clinical workflows that were not previously viable, allowing for more efficient care and better patient outcomes.

Statistician   *Toronto, Canada*
APPLIED HEALTH RESEARCH CENTRE - ST. MICHAEL'S HOSPITAL   *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.

Statistical Analyst   *Hamilton, Canada*
ST. JOSEPH'S HEALTHCARE HAMILTON   *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

deeplearning.ai   *Coursera*
DEEP LEARNING SPECIALIZATION   *2020*

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*