

MAIREAD SHAW

maireadkshaw@gmail.com | (514) 758-5730 | github.com/mkshaw | maireadshaw.ca

EDUCATION

PhD in Quantitative Psychology

2020 – 2025

McGill University, Montreal, QC

Bachelor of Science in Psychology with distinction

2014 – 2019

McGill University, Montreal, QC

PROJECTS

PhD Candidate

09/2020 – Present

McGill University

- Created and published R package with 40,000+ downloads ([r2mlm](#)).
- Designed numerous experiments and simulation studies using R and Python.
- Analyzed experimental and large-scale consumer data.
- Published results in high-impact peer-reviewed journals and presented at international conferences.
- Led workshops, teaching colleagues and students advanced statistical techniques.

Statistical Consultant

05/2021 – Present

- Analyzed COVID Alert app data to determine uptake and estimate prevented infections and deaths.
- Advised government agency on app development to facilitate public health interventions.
- Assisted with analysis plan design for funded studies for physician researchers.
- Conducted analyses and prepared reports on big data using R and Python.

Data Scientist

10/2021 – 04/2023

McGill Martlets Hockey Team

- Developed machine learning algorithms to predict wins with 75% accuracy and plan practices.
- Used item response theory to generate personalized player recommendations.
- Prepared monthly reports identifying team weaknesses to improve and strategies to employ.
- Conducted statistical analyses and prepared Tableau dashboards communicating insights to staff.

COMMUNICATION

Teaching: wrote textbook for introduction to multilevel modelling, www.learn-mlms.com. Physical book forthcoming from Taylor & Francis.

Workshops:

Introduction to Data Science in R

01/2024

Bootstrapping in Multilevel Datasets

10/2023

Effect Sizes in Multilevel Models

03/2022, 06/2022, 03/2023

SKILLS

Technical: R, Python, SQL, Git, Bash, Unix, AWS, Travis CI, Tableau, PowerBI

Statistics: A/B testing, machine learning, regression, multilevel modelling, principal component analysis, structural equation modelling, analysis of variance, hypothesis testing

Research: data wrangling, data visualization, data simulation, report writing, communication, presentations

Languages: English (native), French (intermediate)