

MAIREAD SHAW

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EDUCATION

PhD in Quantitative Psychology

2020 – 2025

McGill University, Montreal, QC

Bachelor of Science in Psychology with distinction

2014 – 2019

McGill University, Montreal, QC

EXPERIENCE

Behavioural Science Intern

05/2024 – 08/2024, 01/2025 – 04/2025

Intact Insurance

- Deployed machine learning models in R and Python to predict customer renewal and evaluate drivers of customer satisfaction.
- Used natural language processing on 90,000 social media interactions to inform brand refresh.
- Analyzed large datasets of survey responses and customer profiles to derive actionable insights.
- Integrated and processed data from diverse sources to generate insights on customer advocacy.
- Proposed appropriate methodology to minimize response bias in customer surveys.

PhD Candidate

09/2020 – Present

McGill University

- Created and published R package with 48,000+ downloads ([r2mlm](#)).
- Designed numerous experiments and simulation studies using R and Python.
- Published results in high-impact peer-reviewed journals and presented at international conferences.
- Led workshops, teaching colleagues and students advanced statistical techniques.
- Supervised projects by developing timelines, conducting weekly progress check-ins, providing strategic guidance, and reviewing work drafts.

Data Scientist

10/2021 – 04/2023

McGill Martlets Hockey Team

- Deployed machine learning algorithms to predict winning and inform focus during 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.

Data Scientist

05/2021 – 10/2021

Health Canada

- Analyzed COVID Alert app data to determine uptake and estimate prevented infections and deaths.
- Advised government on app development to facilitate public health interventions.
- Presented report to COVID Alert committee and Health Canada.

SKILLS

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

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

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

Languages: English (native), French (intermediate)