Spencer A. Arbuckle, PhD

[Personal Website](#) | [LinkedIn](#) | [GitHub](#) | [Google Scholar](#)

phone: 204-293-2862
email: saarbuckle@gmail.com

Self-motivated and curious with 10 years of data science experience in research and government sectors, I have a knack for figuring out what the thorny problems are and devising data-driven ways to solve them. My work spans several themes including public health, neuroscience, and computational pipeline development.

SELECTED PROFESSIONAL EXPERIENCE

Public Health Data Scientist, Statistics Canada   *06/2022 – present*
- Identify, develop, pitch, and implement programs that modernize public health statistical operations
- Wrote web scrapers (xml2 in R) to pull and organize data from over 60,000 webpages into a linkable database, resulting in a 10-fold decrease in data collection time and improved data quality
- Designed geospatial models (sf in R) to reveal fine-grained insights into patient access to health care, and communicated compelling data stories through interactive visualizations (leaflet)

Neurotechnology Course Developer, Queen's University   *02/2022 – present*
- Led the development of an interactive online course about neuroimaging and medical neurotechnology for an interdisciplinary audience (with coding exercises written in Python)
- Established external relations with private neurotech companies to demo new medical technology
- Secured nearly $1,000,000 CAD in competitive funding from Ontario Government

Lead Analyst, Canadian Science Policy Centre   *02/2022 – present*
- Led a diverse team of 14 volunteers on the development, collection, and analysis of 4 surveys for private, government, and scientific audiences
- Spearheaded the re-organization of our team's analytical infrastructure
- Delivered annual consultation presentation to communicate data insights to representatives from 50 external financial sponsors

Computational Neuroscientist, University of Western Ontario   *01/2016 – 10/2021*
- Managed 4 international research projects which resulted in 8 peer-reviewed scientific journal articles
- Presented projects at 12 international conferences as well as invited lectures at Johns Hopkins University, Brown University, and Imperial College London
- Developed, evaluated, and implemented experimental devices for sensorimotor research
- Developed new Bayesian model pipeline for multivariate analysis of brain data (matlab & python)
- Secured over $80,000 CAD in funding from competitive university and government awards
- Taught courses and led workshops in data science, statistics, and neural networks
- Invited technical expert reviewer for multiple international scientific journals and granting agencies

Lab Manager, University of Western Ontario   *05/2014 – 08/2015*
- Managed infrastructure (budget, equipment, ethics protocols, data storage) for 2 human perception research labs

EDUCATION

PhD, Computational Neuroscience, University of Western Ontario   *01/2016 – 10/2021*
BSc (Honours), Psychology, Queen's University   *01/2010 – 06/2014*