

# Ryan Campbell

Department of Mathematics & Statistics  
Lancaster University  
Fylde Ave., Bailrigg, Lancaster  
LA1 4YR

Webpage: [www.ryanstats.com](http://www.ryanstats.com)  
Email: [r.campbell3@lancaster.ac.uk](mailto:r.campbell3@lancaster.ac.uk)

## Research Interests

Multivariate extreme value theory and its applications, dependence modeling, stochastic processes, statistical computation.

## Education

2021–2025\* PhD Statistics, Lancaster University

Thesis: Statistical Exploits of New Insights for Multivariate Extremes

Supervisor: Jennifer L. Wadsworth

*\*Sept. – Dec. 2022: Visiting PhD researcher under the supervision of Daniel Cooley at Colorado State University.*

2019–2020 MSc Mathematics & Statistics, McGill University

Thesis: Deterministic Gaussian Averaged Neural Networks

Supervisor: Adam Oberman

2015–2018 BSc Mathematics, McGill University

## Papers

### Preprints

- [1] J. L. Wadsworth and **R. Campbell**. Statistical inference for multivariate extremes via a geometric approach, 2022. URL <https://arxiv.org/abs/2208.14951>
- [2] **R. Campbell**, C. Finlay, and A. M. Oberman. Adversarial Boot Camp: label free certified robustness in one epoch, 2020. URL <https://arxiv.org/abs/2010.02508>
- [3] **R. Campbell**, C. Finlay, and A. M. Oberman. Deterministic Gaussian averaged neural networks, 2020. URL <https://arxiv.org/abs/2006.06061>

## Research & Professional Activities

- **Data Science Intern**

Desjardins General Insurance Group. Lévis, Québec.

June–December 2020 (part-time), January–June 2021 (full-time)

- **Undergraduate Summer Research**

Department of Mathematics & Statistics, McGill University.

Supervisor: Johanna Nešlehová

May–September 2018

## Teaching Assistant

### Lancaster University

Winter 2022	MATH456/556	Extreme Value Theory
Winter 2022	MATH235	Statistics II
Fall 2021	MATH330	Likelihood Inference

### McGill University

Fall 2020	MATH208	Intro. to Statistical Computing
Fall 2019	MATH597	Topics in Applied Mathematics: Mathematics of Machine Learning
Fall 2019	MATH223	Linear Algebra

## Languages & Skills

- Fluent in English and French.
- Proficient in R, Python (incl. PyTorch), Matlab, LaTeX, Java, HTML, Linux

## Honours, Awards, and Funding

2021–2025	EPSRC Mathematical Sciences studentship (£15,609 per year)
2020	Mitacs internship at Desjardins (CAD \$13,000)
2019–2020	Master’s degree funding (CAD \$20,500)
2019–2020	McGill University Graduate Excellence Award (CAD \$3,400)
2018	Dr. Kenneth Davis Science Undergraduate Research Award (CAD \$6,500)

## **Extracurricular Activities**

- **VP Finance**, Graduate Student Association for Mathematics and Statistics (GSAMS)  
McGill University  
2019–2020 academic year.
- **Volunteer at the 2018 Statistical Society of Canada annual meeting**  
Roles: Setting up audio-visual equipment for presentations and directing conference attendees to presentations.  
Location: McGill University  
3–6 June 2018