



OLIVIER BINETTE

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Education

Duke University

Aug. 2019 – present

Ph.D. in Statistical Science (3.9 GPA; GRE 167 quant, 165 verbal)

Durham, NC

Université du Québec à Montréal (UQÀM)

Sept. 2014 – July 2019

B.Sc. and M.Sc. in Mathematics (3.97 & 4.0 GPA)

Montréal, Qc.

Awards

- Canada Governor General's Academic Medal (2020)
- Alexander-Graham-Bell Canada Graduate Scholarship (2019; CAD 135,000)
- Fond de Recherche du Québec - Nature et Technologies Doctoral Award (2019; CAD 105,000)

Research Experience and Publications

Research Assistant for Professor Rebecca C. Steorts

January 2020 – Present

- **R packages on Github:** `dgaFast`, `MSETools`, `assert`, `cache`, `fingermatchR`, `tessTools`.
- **Binette, O. & Steorts, R. C.** (2021) On the Reliability of Multiple Systems Estimation for the Quantification of Modern Slavery. *Submitted*.
- **Binette, O. & Steorts, R. C.** (2020) Almost All of Entity Resolution. *arXiv e-prints*. arxiv:2008.04443
- **Binette, O. & Steorts, R. C.** (2020) Discussion of read paper “Multiple-systems analysis for the quantification of modern slavery: classical and Bayesian approaches” by Bernard Silverman. *Journal of the Royal Statistical Society Series A* 183 (3). pp. 35

Research Assistant for Professor Simon Guillotte

2017 – 2019

- **Binette, O. & Guillotte, S.** (2021). Bayesian Nonparametrics for Directional Statistics. *Journal of Statistical Planning and Inference*
- **Binette, O. & Pati, D. & Dunson, D. B.** (2020) Bayesian Closed Surface Fitting Through Tensor Products. *Journal of Machine Learning Research* 21 (119) pp. 1-26
- **Binette, O.** (2019). A Note on Reverse Pinsker Inequalities. *IEEE Transactions on Information Theory* 65 (7). pp.4094-4096

Leadership and Teamwork

Research Coordinator | Duke GPSG Community Pantry

May 2021 – Present

- Survey design, data analysis, and reporting for Pantry stakeholders.
- Prepare and implement five-year plan to monitor food insecurity on campus.

Instructional Teaching Assistant

2017 – Present

- **At Duke University:** Instructional TA for Bayesian and Modern Statistics (Fall 2020), Entity Resolution (Spring 2021), and Introduction to Data Science (Fall 2021).
- **At UQÀM:** Instructional TA for Statistics I (Winter 2019), Analysis I (Winter 2019), Probability II (Fall 2018), Complex Analysis (Winter 2018), MAT1190 (Analysis and algebra for the actuarial sciences, Winter 2018), Analysis II (Fall 2017 & Fall 2018).

Data+ Project Manager | Data Visualization for Family Health

June – August 2021

- Manage a team of 3 undergraduate and masters students. Working with R Shiny to build a data visualization dashboard for the UC Davis Perinatal Origins of Disparities Center.

Project Manager | Duke Applied Machine Learning's Chronicle Project

January – May 2021

- Optical character recognition of historical newspaper archives and article segmentation.

Data+ Project Manager | Linking Urban Land Use to River Metabolism

June – August 2020

- Manage a team of 3 undergraduate students analyzing time series data and geospatial data for the Duke River Center.

Relevant Skills

Programming: Advanced R, R package development, Rcpp, C/C++, git, Java & Javascript

Developer Tools: RStudio, vscode, Github, bash, Linux, SLURM