



OLIVIER BINETTE

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Education

Duke University

Ph.D. Candidate, Department of Statistical Science (3.9 GPA)

Aug. 2019 – present

Durham, NC

Université du Québec à Montréal (UQÀM)

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

Sept. 2014 – July 2019

Montréal, QC

Awards

- Canada Governor General's Academic Medal (2020)
- Stanford University fully-funded PhD admission offer (2019)
- Alexander-Graham-Bell Canada Graduate Scholarship (2019; CAD 135,000)
- Fond de Recherche du Québec - Nature et Technologies Doctoral Award (2019; CAD 105,000)
- Faculty of Arts & Science Top doctoral award (University of Toronto, 2019)
- Natural Sciences and Engineering Research Council of Canada Masters Award (2017)
- Fond de Recherche du Québec - Nature et Technologies Masters Award (2017)

Research Experience and Publications

Research Assistant for Professor Rebecca C. Steorts

2019 – 2021

- **Binette, O.** & Steorts, R. C. (2021) On the Reliability of Multiple Systems Estimation for the Quantification of Modern Slavery. *Journal of the Royal Statistical Society Series A* (to appear; ASA best paper award).
- **Binette, O.** & Steorts, R. C. (2021) Modern Bayesian Entity Resolution. *Wiley StatsRef* (to appear).
- **Binette, O.** & Steorts, R. C. (2021) (Almost) All of Entity Resolution. *Science Advances* (to appear)
- **Binette, O.** & Steorts, R. C. (2020) Discussion of “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* 216 pp. 118-134
- **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

Professional Experience

Data Scientist Intern | Intact Financial Corporation

January 2021 – Present

- Python package development with the AI Engineering team.

Webmaster | American Statistical Association Record Linkage Interest Group

November 2020 – Present

- Website and blog development for the organization.

Research Coordinator | Duke GPSG Community Pantry

May 2021 – Present

- Developed the research plan adopted by Duke University to monitor food insecurity on campus.
- Record linkage, survey design, and data analysis for program assessment.

Instructional Teaching Assistant

2017 – 2021

- **At Duke University:** Instructional TA for Bayesian and Modern Statistics, Entity Resolution, and Introduction to Data Science.
- **At UQÀM:** Instructional TA for Statistics I, Analysis I, Probability II, Complex Analysis, Analysis and algebra for the actuarial sciences Analysis II.

Data Science Project Manager | Information Initiative at Duke

June – August 2021

- Supervised a team of students building a data visualization dashboard for the UC Davis Perinatal Origins of Disparities Center.

Data Science Project Manager | Duke Applied Machine Learning

January – May 2021

- Supervised a team of students working on optical character recognition and article segmentation for historical newspaper archives.

Data Science Project Manager | Information Initiative at Duke

June – August 2020

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

Programming Skills and Software Development

Programming: R, Python, Javascript, C/C++, Java, git, bash, Linux, slurm

R packages on Github: dgaFast, MSETools, assert, cache, fingermatchR, TessTools.

Python packages on Github: StringCompare, GroupByRule