

Remi Daviet

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Research Interests

Methodology:

- Machine Learning / Deep Learning, Bayesian & Computational Econometrics, Quantitative Modelling

Applications:

- Consumer Decision Making, Demand Analysis, Consumer Neuroscience

Current Position

Post-Doctoral Researcher, Wharton Marketing Department, University of Pennsylvania

Supervision: Gideon Nave & Eric Bradlow

Education

Ph.D. Economics | University of Toronto | 2014 - 2018

- Dissertation: Methods for Statistical Analysis and Prediction of Choice
- Committee:
 - Econometrics: Martin Burda (co-chair), Christian Gourieroux (co-chair)
 - Marketing: Andrew Ching, Ryan Webb
- Honors: Distinction in Econometrics - Major: Econometrics - Minor: Industrial Organization

M.Sc. Economics | University of Montreal | 2013 - 2014

- Dissertation: Non-parametric Bayesian Analysis of Discrete Choice Experiments
- Honors: Dean's list

M.B.A. | Laval University | 2009 – 2011

B.Sc. Management | University of Lausanne (HEC) | 2005 – 2008

Professional Experience

IT & Digital Marketing (company founder) | Daviet Innovation Inc. 2011-2014

Academic Papers

Accepted & Revision Invited

1. “Reflecting on the Evidence: A Reply to Knight, McShane, et al. (2020)”, *Psychological Science* 31-7 (2020), G. Nave, R. Daviet, A. Nadler, D. Zava, C. Camerer
2. “The Consumer DNA Revolution: Potential Uses and Misuses of Genetic Data in Marketing Strategy”, *Journal of Marketing* (2nd round), R. Daviet, G. Nave, Y. Wind
3. “Genetic Underpinnings of Risky Behavior Relate to Altered Neuroanatomy”, *Nature Human Behaviour* (2nd round), G. Aydogan, R. Daviet, R. Karlsson Linnér, T. A. Hare, J. W. Kable, H. R. Kranzler, R. R. Wetherill, C. C. Ruff, P. D. Koellinger, G. Nave
4. “Hamiltonian Sequential Monte-Carlo: Application to Consumer Demand”, *Econometric Reviews* (R&R), M. Burda, R. Daviet

5. "Multimodal brain imaging study of 19,825 participants reveals adverse effects of moderate drinking", *Nature Communications* (R&R), R. Daviet, G. Aydogan, K. Jagannathan, N. Spilka, P. Koellinger, H. Kranzler, G. Nave, R. Wetherill
6. "Social Preference Estimation Using Adaptive Experimental Design", *Experimental Economics* (pre-results R&R), T. Imai, D. Bose, R. Daviet, G. Nave, C. Camerer

Under Review

7. "Bayesian Deep Learning for Small Datasets: Leveraging Information from Product Pictures", R. Daviet
8. "A Double Decoy Experiment to Distinguish Theories of Dominance", R. Daviet, R. Webb

Working Papers

9. "Neural Attribute Normalization: An Application to Product Portfolio Optimization", R. Daviet
10. "Sequential Optimal Inference for Experiments with Bayesian Particle Filters", R. Daviet
11. "Multialternative Drift Diffusion Model Estimation with Path Splitting", R. Daviet
12. "Sequential Monte Carlo for Hierarchical Bayes with Large Datasets", R. Daviet
13. "Inference with Hamiltonian Sequential Monte Carlo Simulators", *arXiv:1812.07978*, R. Daviet

Work in Progress

14. "The Face of Your Brand: Automated Model Casting and Visual Enhancement for Advertising", R. Daviet, G. Nave
15. "Foundations of the Decoy Effect: Putting Theory to the Test", U. Bergmann, R. Daviet, E. Fehr
16. "Save the Best for Last: Consumer Beliefs about Product Attributes Drive Intertemporal Context Effects", R. Daviet, L. Fei
17. "Causal Influence of Visual Feature Combinations on Digital Advertising Performance", Y. Gao, R. Daviet

Conference Presentations

"Bayesian Deep Learning for Small Datasets: Leveraging Information from Product Pictures"

- Presentation: INFORMS Marketing Science (2020)

"Attribute Normalized Conjoint Analysis: A Neural Decision Model for Discrete Choice"

- Presentation: UT Dallas Frontiers of Research in Marketing Science (2020)

"The Consumer DNA Revolution: Why Marketers Should Care About Genomic Data"

- Presentation: Society for Consumer Psychology (2020)

"Sequential Optimal Inference for Experiments with Bayesian Particle Filters"

- Presentation: INFORMS Marketing Science (2019), Sloan-Nomis Workshop on attention and choice (2019), Workshop on Cognitive Foundations of Economic Behavior, NYU Stern (2019)
- Poster: Society for Neuroeconomics (2017), 7th Consumer Neuroscience Symposium (2017), Canadian Econometric Study Group (2017), Workshop for Interactions between Econometrics and Applied Microeconomics (2017)

"Big Data for Demand Estimation: A Bi-Clustering Approach"

- Poster: Canadian Econometric Study Group (2016), Fields Institute - New challenges for Big Data in Economics and Finance (2016)

"Bayesian Non-Parametric Inference for Discrete Choice Experiments with Multi-Dimensional Clustering"

- Presentation: Canadian Doctoral Workshop in Applied Econometrics (2015)

Seminars and Other Presentations

UC Davis, Marketing Dept. (Mar 2020)

Caltech, Humanities and Social Sciences (Camerer Lab Seminar, Mar 2020)

Stanford, Graduate School of Business, Marketing Dept. (Feb 2020)

U of Pennsylvania, Computational Behavioral Science Lab, Psychology Dept. (Oct 2019)

Teaching

Honors: Toronto Economic Department Teaching Excellence Award (2015)

Teaching Interests:

Machine Learning & Marketing Analytics, Statistics (Bayesian, Traditional, Computational), Experimental and Behavioral Research, Decision Models, Data Driven Decision Making

Course instructor:

- Experiments for Business Decision Making, 2020 (Wharton, MBA)
- Empirical Industrial Organization, 2017 (Toronto Econ., Undergraduate)

Teaching Assistant (Toronto):

- Undergraduate Level: Quantitative Methods in Economics (Business/Econ.), Econometrics (Econ.)
- Master Level: Econometrics (Master of Financial Economics), Stata / Matlab / R Departmental Assistant (Multicourse)
- Doctoral Level: Econometrics II (Econ.)

Academic Service

- Reviewer: Management Science

Programming Skills

- Languages: Python, R, MATLAB, C/C++, CUDA (GPU), PHP
- Methods: Parallel Computing, GPU Computing (Nvidia), High Performance Computing (Amazon's AWS EC2/Lambda, Compute Canada, Netherlands' Surfsara, Wharton's HPC)
- Environment: Windows, Linux (Desktop/Server)

Academic Society Membership

- American Marketing Association (AMA), Society for Judgment and Decision Making (SJDM), Society for Neuroeconomics (SNE), Society for Consumer Psychology (SCP)

Other Skills

- Languages: English (Fluent), French (Fluent), Japanese (Intermediate), German (Intermediate), Korean (Beginner), Chinese (Beginner)
- Music: Bass (5 strings), Piano, Drum, Computer Assisted Composition, Acapella
- Sports: Capoeira, Inline Skating, Triathlon

References:

Gideon Nave, Wharton Marketing Department, University of Pennsylvania

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Eric Bradlow, Wharton Marketing Department, University of Pennsylvania

Professor of Marketing & Chairperson,

Vice Dean of Analytics at Wharton

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Colin Camerer, Humanities and Social Sciences, Caltech

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Philipp Koellinger, La Follette School of Public Affairs, University of Wisconsin – Madison

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