

Alexis Bellot

64c Huntingdon street, N1 1BX, London, UK

✉ ab2583@cam.ac.uk 🌐 alexisbellot.github.io/Website/

Education

University of Cambridge

Cambridge, United Kingdom

PHD APPLIED MATHEMATICS - MACHINE LEARNING

Expected Sept. 2020

- I develop algorithms and predictive models to help clinicians give individualized care to their patients.
- I am affiliated with - and funded by - the Alan Turing Institute.
- Supervisor: Prof. Mihaela van der Schaar.

University of Oxford

Oxford, United Kingdom

MSc APPLIED STATISTICS

Sept. 2017

- MSc Grade: Distinction.
- Courses in Graphical Models, Applied Statistics, Foundations of Statistical Inference, Statistical Programming, Statistical Machine Learning, Bayes Methods, Computational Statistics, Data Mining and Machine Learning.

Imperial College London

London, United Kingdom

BSc MATHEMATICS

Jun. 2016

- BSc Grade: First Class Honours.
- Courses in all areas of Mathematics with a specialization in Statistics.

Publications

Causal inference

- A. Bellot, M. van der Schaar, "Invariant Causal Discovery from multiple environments," *In progress*.
- Y. Zhang, A. Bellot, M. van der Schaar, "Learning Overlapping Representations for the Estimation of Individualized Treatment Effects," *In submission*.

Hypothesis Testing

- A. Bellot, M. van der Schaar, "Hypothesis testing with uncertain curves," *In progress*.
- A. Bellot, M. van der Schaar, "A Fair Kernel Two Sample Test," *In submission*.
- A. Bellot, M. van der Schaar, "Conditional Independence Testing using Generative Adversarial Networks," *NeurIPS*, 2019.

Risk prediction

- Z. Qian, A. Alaa, A. Bellot, M. van der Schaar, "Learning Dynamic and Personalized Comorbidity Networks from Event Data using Deep Diffusion Processes," *In submission*.
- A. Bellot, M. van der Schaar, "A Bayesian Approach to Modelling Longitudinal data," *Health workshop NeurIPS*, 2019.
- A. Bellot, M. van der Schaar, "Boosting Transfer Learning with Survival Data from Heterogenous Domains," *AISTATS*, 2019.
- A. Bellot, M. van der Schaar, "Multitask Boosting for Survival Analysis with Competing Risks," *NeurIPS*, 2018.
- A. Bellot, M. van der Schaar, "Boosted Trees for Risk Prognosis," *Machine Learning for Healthcare Conference (MLHC)*, 2018.
- A. Bellot, M. van der Schaar, "A Hierarchical Bayesian Model for Personalized Survival Predictions," *IEEE J. BHI*, 2018.
- A. Bellot, M. van der Schaar, "Tree-based Bayesian Mixture Model for Competing Risks," *AISTATS*, 2018.

Work Experience

PIMCO

London, United Kingdom

SUMMER ANALYST, GLOBAL WEALTH MANAGEMENT

Jun. 2016 - Aug. 2016

- Internship with an asset manager in the financial industry.
- Duties consisted in providing overall support to senior staff and clients.

Undergraduate Research, Imperial College London

London, United Kingdom

RESEARCH INTERN ON EXTREME VALUE THEORY (PROF. RAMA CONT)

Feb. 2015 - Jun. 2015

- 6-month collaboration on a research project aside from my undergraduate studies.
- Investigated extreme returns of a financial index under the framework of Extreme Value Theory (that formally describes the likelihood of extreme events).
- Produced a written report with overview of the theory and findings.