

# Alexis Bellot

London, UK

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## 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

- Y. Zhang, A. Bellot, M. van der Schaar, "Learning Overlapping Representations for the Estimation of Individualized Treatment Effects", *AISTATS*, 2020.

### Hypothesis testing

- 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", *AISTATS*, 2020.
- 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.