# Michael Arbel

# Curriculum Vitae

### Education

 Education
Gatsby Computational Neuroscience Unit, PhD in Machine Learning, UK. Adversarial metrics for unsupervised learning. Supervisor: Arthur Gretton
<b>École Normale Supérieure de Cachan, MSc in Computer Science</b> , <i>MVA</i> , France. Graphical Models, Deep Neural Networks, Reinforcement Learning, Object Recognition.
<b>École Polytechnique, Ingénieur de l'Ecole Polytechnique</b> , <i>Mathematics and Physics</i> . Statistical Learning & Nonparametric Estimation, Operations Research, Stochastic Calculus
Work experience
<b>Teaching Assistant</b> , <i>UCL</i> Probabilistic and Unsupervised Learning

DeepMind/CSML Seminars: Help organizing weekly seminars on topics in Machine Learning.
 10-2015 Computer Vision Engineer, Chronocam.

- Advanced Topics in Machine Learning

- 09-2016 Developed multi-target tracking algorithms for neuromorphic event-based cameras.
- 04-2015 Graduate Student Researcher, Data Team DI, ENS Paris.
- 09-2015 Studied the dynamics of recurrent networks that capture long-range dependencies in simple grammars. Supervisor: Stéphane Mallat.
- 04-2014 **Graduate Student Researcher**, *ORFE*, Princeton University.
- 06-2014 Proved an existence and uniqueness result for a class of mean field games with dependence on the control. Supervisor: René Carmona.

#### Publications

- 2018 **Michael Arbel**, Arthur Gretton. Kernel Conditional Exponential Family. *Proceedings* of the 21st International Conference on Artificial Intelligence and Statistics, AISTATS 2018
- 2018 Dougal J. Sutherland, Heiko Strathmann, Michael Arbel, Arthur Gretton. Efficient and principled score estimation. Proceedings of the 21st International Conference on Artificial Intelligence and Statistics, AISTATS 2018
- 2018 Mikołaj Bińkowski, Dougal J. Sutherland, Michael Arbel, Arthur Gretton. Demystifying MMD GANs. Submitted to ICLR 2018

# Competitions and Awards

- 2011–2015 French Government Eiffel Excellence Scholarship
  - 2014 Award of Financial Risk Chair of École Polytechnique for the research internship
  - 2013 Award for "Outstanding Position Paper" at Model United Nation, New York.
  - 2009 Participation to International Mathematical Olympiads, Germany.

## Computer Skills

Basic HTML, SQL

Intermediate Java, R, Lua

Advanced Python, C++, Matlab, LATEX, Git

## Languages

English Proficiency Level
French Mother tongue
Arabic Mother tongue