

# Emile MATHIEU

## PERSONAL DATA

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## WORK EXPERIENCE

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- MAY-SEP 2017 | Machine Learning Research Intern at **Department of Statistics, Oxford**  
Develop original inference methods in the context of probabilistic programming languages, supervised by Prof. Yee Whye Teh.
- JAN-JUL 2016 | Data Scientist Intern at **Criteo**, Paris  
In the context of online auctions, I worked to improve predictive bidding models' reactivity, so as to make them able to quickly and precisely react to perturbative or periodical events such as sales.
- JUL-DEC 2015 | Developer at **BAM Lab**, Paris  
Worked as a full-stack developer, using leading technologies such as Cordova and React-Native to develop mobile and website applications, and their associated backend services.
- MAY-JUL 2014 | Data Scientist Intern at **IFSTTAR** Research Institute, Paris  
Applied probabilistic models such as LDA, along with web visualizations, to transportation's data in order to enhance the understanding of commuters' behavior.

## EDUCATION

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- SINCE SEPT 2017 | PhD in MACHINE LEARNING with Prof. Yee Whye TEH  
at **University of Oxford's** Department of STATISTICS
- 2016 - 2017 | Master of Science (II) in MACHINE LEARNING & COMPUTER VISION (MVA)  
at **Ecole Normale Supérieure de Cachan**, Paris, passed with honours | GPA: 4/4
- 2014 - 2015 | Master of Science (I) in MATHEMATICS & COMPUTER SCIENCE  
at **École des Ponts ParisTech**, Paris | GPA: 3.94/4
- 2011 - 2014 | Bachelor's Degree in ENGINEERING at **École des Ponts ParisTech**, Paris  
GPA: 3.857/4
- JULY 2011 | Baccalauréat (French secondary school diploma), Nantes  
Science major, passed with honours

## LANGUAGES

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FRENCH: Mothertongue   ENGLISH: Fluent (TOEIC: 930, TOEFL: 103, GRE VR: 157)   SPANISH: Moderate

## COMPUTER SKILLS

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Intermediate Knowledge: Matlab, C++, JavaScript, Julia, TensorFlow  
Advanced Knowledge: Python, PyTorch, Bash,  $\text{\LaTeX}$

## PUBLICATIONS

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- [1] Emile Mathieu et al. “Hierarchical Representations with Poincaré Variational Auto-Encoders”. In: (2019). URL: <https://arxiv.org/abs/1901.06033>.
- [2] Emile Mathieu et al. “Disentangling Disentanglement in Variational Auto-Encoders”. In: *NeurIPS Workshop on Bayesian Deep Learning* (2018). URL: <https://arxiv.org/abs/1812.02833>.
- [3] Benjamin Bloem-Reddy et al. “Sampling and Inference for Beta Neutral-to-the-Left Models of Sparse Networks”. In: *Conference on Uncertainty in Artificial Intelligence*. Aug. 2018. URL: <https://arxiv.org/abs/1807.03113>.
- [4] Benjamin Bloem-Reddy et al. “Sampling and inference for discrete random probability measures in probabilistic programs”. In: *NIPS Workshop on Advances in Approximate Bayesian Inference* (2017). URL: <http://approximateinference.org/2017/accepted/Bloem-ReddyEtAl2017.pdf>.