

# Aude Genevay

born 27/12/1991 in Bourgoin-Jallieu (France)

4 rue du Charolais 75012 Paris

Phone : 06.79.54.58.43 / Email : [aude.genevay@gmail.com](mailto:aude.genevay@gmail.com)

<https://audeg.github.io>

## Education

- 2015 - PhD in Mathematics - U. Paris Dauphine**  
« Large scale optimal transport for machine learning »  
Under supervision of G. Peyré - PhD grant from Région Ile de France
- 2013-2015 ENSAE ParisTech - Engineering degree - Major in Machine Learning, minor in Economics**  
Member of the student's team for data science competitions (Data Science Game)
- 2014-2015 Master M2 MASH Machine Learning and Applications - ENS Cachan & U. Paris Dauphine**  
Summa Cum Laude - Rank : 1/20  
Thesis : « Transfer Learning for spoken dialogue systems »
- 2013-2014 Master M2 EDP-MAD Mathematical Modeling - U. ParisDauphine**  
Summa Cum Laude (no ranking)  
Thesis : « Matching with unobserved heterogeneity »
- 2012-2013 Master M1 MMD Mathématiques Appliquées - U. Paris Dauphine**  
Summa Cum Laude - Rank : 1/140
- 2011-2012 Licence L3 MIDO Mathématiques Appliquées - U. Paris Dauphine**  
Magna Cum Laude - Rank : 6/120

## Awards - Grants

- 2017** Google PhD Fellowship
- 2015** Région Ile de France PhD Grant
- 2012-2014** Master's grant from Fondation Sciences Mathématiques Paris (for academic excellence)

## Research Internships

- May-Sept. 2015 Orange Labs** - advised by R. Laroche  
Reinforcement Learning for spoken dialogue systems  
Java implémentation of a dialogue simulator  
Redaction of a paper accepted at AAMAS 2016
- June-Sept. 2014 INRIA Roquencourt** - advised by G. Carlier and J.-D. Benamou  
Numerical methods for optimal transport, applications to the matching problem
- July-Aug. 2012 U. Paris Dauphine** - advised by F. Forges  
Repeated bayesian games

## Publications

- A. Genevay, L. Chizat, F. Bach, M. Cuturi, G. Peyré « **Sample Complexity of Sinkhorn Divergence** » Technical report, arXiv-1810.02733, 2018.
- A. Genevay, M. Cuturi, G. Peyré « **Learning Generative Models with Sinkhorn Divergences** » In : *International Conference on Artificial Intelligence and Statistics, 2018*. p. 608-1617.
- A. Genevay, M. Cuturi, G. Peyré, & F. Bach « **Stochastic Optimization for Large-scale Optimal Transport** » In : *Advances in Neural Information Processing Systems, 2016*. p. 3440-3448.
- A. Genevay & R. Laroche, « **Transfer Learning for User Adaptation in Spoken Dialogue Systems** » In : *Proceedings of the 2016 International Conference on Autonomous Agents & Multiagent Systems. International Foundation for Autonomous Agents and Multiagent Systems, 2016*. p. 975-983.

## Teaching

- 2017 - 2019** Machine Learning (M1 Info - Ecole Normale Supérieure)
- 2016 - 2017** Numerical Optimization (L3 Mido - U. Paris Dauphine)  
Machine Learning (M1 MMD - U. Paris Dauphine)
- 2015 - 2016** Lebesgue Integration (L3 Mido - U. Paris Dauphine)  
Introduction to probability theory (L1 Mido - U. Paris Dauphine)

## Additional Skills

- Languages** English - fluent (numerous stays in the US)  
German - conversational (numerous stays in Germany)
- Programming** Python (Scikit-learn, Tensorflow, Pytorch), Matlab, Java, R
- Other Interests** Cycling, Hiking, Swimming