

# Marina Vinyes

*Phd in Machine Learning*

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📄 <https://vinyesm.github.io/>

## Education

- 2013–2017 **Phd in Machine Learning**, *Imagine lab, Ecole des Ponts ParisTech*, France.  
*Machine learning algorithms for large matrix models* under the supervision of Guillaume Obozinski.
- 2012–2013 **Msc in Computer Vision and Machine Learning (MVA)**, *ENS Cachan*, France.
- Statistical learning
  - Probabilistic graphical models
  - Kernel Methods
  - Convex Optimization
  - Reinforcement learning
  - Sparsity and compressed sensing
- 2009–2011 **Engineering degree in Mathematics and Computer Science**, *Ecole des Ponts ParisTech*, France.
- 2006–2009 **Preparatory classes in Mathematics and Physics**, *Lycée Saint Louis*, France.  
Intensive program preparing for the national competitive exam for entry to engineering schools
- 2003–2006 **High School diploma**, *Lycée Français de Barcelone*, Barcelona.

## Experience

- 2015–2016 **Teaching Introductory course of C++ programming**, *Ecole des Ponts ParisTech*, France.
- 2011–2012 **Internship in medical imaging**, *Philips Healthcare*, Suresnes.  
Development of an interface with C# to compare MRI images and echocardiographies of heart failure patients
- April–June 2010 **Internship**, *Tongji University*, Shanghai.  
Study of water pollution by heavy metals
- Sept. 2009 **Internship**, *Sanofi Aventis*, France.  
Worker in a line work labeling drugs

## Projects

- April 2014 **Google Paris Hash Code 2014**, *Paris*, France.  
One day team programming competition. The task was, given a map of Paris and limited time, choose a route for the 8 cars which allows you to cover as many streets as possible.

2013 **Master thesis on Large scale online Collaborative Filtering**, *Paris*, France.  
New online algorithm for making automatic predictions about the interests of a user by collecting preferences or taste information from many users (recommender systems problem).

## ■ Publications

M. Vinyes, G. Obozinski. **Fast column generation for atomic norm regularization**, Proceedings of the 20th Conference on Artificial Intelligence and Statistics, 2017.

M. Vinyes, G. Obozinski. **Column generation for atomic norm regularization**, NIPS workshop Learning in High Dimension with Structure, 2016.

## ■ Languages

Native speaker in **French**, **Spanish** and **Catalan**. Fluent in **English**. Basic knowledge of **Chinese**.

## ■ Computer skills

Advanced knowledge in **Matlab**, **C++**. Competent in **Python**.

## ■ Interests

Outdoor sports (running, road cycling, swimming) and painting.