

# Mathurin MASSIAS

## Machine Learning PhD at Inria

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### SKILLS

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MATHEMATICS : Optimisation, Deep Learning  
COMPUTER SCIENCE : Python (excellent), R (good), Matlab (good)  
Git (Github : <http://github.com/mathurinm>)  
StackOverflow : <https://stackoverflow.com/users/2902280/p-camilleri>  
LANGUAGES : English (fluent, 5 months stay in India in 2013), Spanish (basics)

### PROFESSIONAL EXPERIENCE

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SEPT. 2016 - SEPT. 2019 (3 YEARS)	TÉLÉCOM PARISTECH & INRIA (Paris) : PhD student, supervised by A. Gramfort and J. Salmon High dimensional sparse regression, with coloured heteroscedastic noise Machine Learning : Convex and non-convex optimisation, Sparsity, High dimension Technical framework : Python (Cython, numpy, sklearn)
JUNE 2015 - JUNE 2016 (1 YEAR)	CARDIOLOGS (Paris) : Data scientist Design and implementation of automatic heart disease screening algorithms (supervised learning on a dataset of 300,000 ECGs). Machine Learning : Convolutional neural networks, Recurrent neural networks Technical framework : Python (numpy), Tensorflow, Caffe, Theano/nolearn/lasagne
OCT. 2014 - MAR. 2015 (6 MONTHS)	DREEM-DEVICES (Paris) : Data scientist Classification and dimensionality reduction on EEG signals. Machine Learning : Signal processing, Clustering (K-Means, Meanshift, GMM, HMM) Technical framework : Python (numpy, sklearn)
MAR. 2014 - AUG. 2014 (6 MONTHS)	CRITEO (Paris) : Data scientist (intern) Implementation of an automated fraud detection tool (outlier detection). Machine Learning : Hierarchical clustering, anomaly detection Technical framework : Python, C#, Hadoop, Hive, Vertica

### EDUCATION

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SEPT. 2014 - APR. 2015	<b>ENS Cachan</b> : MSc in Mathematics, Computer Vision, Machine Learning (MVA) Summa cum laude (average grade : 16,8/20)
SEPT. 2011 - AVR. 2015	<b>Ecole Centrale Paris</b> : Diplôme d'ingénieur Major in Applied Mathematics and Data Science Average grade : 16,3/20
JAN. 2013 - MAY 2013	Exchange semester at the <b>Indian Institute of Science</b> (Bengalore, Inde) Fundamental mathematics Department
SEPT. 2009 - JUNE 2011	<b>Lycée Henri IV</b> (Paris) : Preparatory classes (MPSI and MP*)

### CENTRES D'INTÉRÊT

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Modern history, Antic history (latin language)  
Photography

## PUBLICATIONS

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- **M. Massias**, O. Fercoq, A. Gramfort and J. Salmon, Generalized Concomitant Multi-Task Lasso for sparse multi-modal regression, AISTATS 2018.
- **M. Massias**, A. Gramfort and J. Salmon, From safe screening rules to working sets for faster Lasso-type solvers, Opt-ML Workshop at NIPS 2017.
- **M. Massias**, J. Salmon and A. Gramfort, Gap Safe screening rules for faster complex-valued multi-task group Lasso, SPARS 2017.
- **M. Massias**, A. Gramfort and J. Salmon, Résolution rapide de problèmes de type Lasso : des règles de Safe Screening aux Working sets, GRETSI 2017.