Mathurin Massias

Machine Learning PhD at Inria

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SKILLS

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

SEPT. 2016 - SEPT. 2019 | TÉLÉCOM PARISTECH & INRIA (Paris) : PhD student, supervised by A. Gramfort and J. Salmon

(3 YEARS) | High dimensional sparse regression, with coloured heteroscedastic noise

Machine Learning: Convex and non-convex optimisation, Sparsity, High dimension

Technical framework: Python (Cython, numpy, sklearn)

Publications : [1, 2, 3, 4, 5]

JUNE 2015 - JUNE 2016 | CARDIOLOGS (Paris) : Data scientist

(1 YEAR) 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 | DREEM-DEVICES (Paris) : Data scientist

(6 MONTHS) 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 | CRITEO (Paris) : Data scientist (intern)

(6 MONTHS) | Implementation of an automated fraud detection tool (outlier detection).

Machine Learning: Hierarchical clustering, anomality detection Technical framework: Python, C#, Hadoop, Hive, Vertica

EDUCATION

SEPT. 2014 - APR. 2015 ENS Cachan: MSc in Mathematics, Computer Vision, Machine Learning (MVA)

Summa cum laude (average grade : 16.8/20)

Major in Applied Mathematics and Data Science

Average grade: 16.3/20

JAN. 2013 - MAY 2013 Indian Institute of Science (Bengalore, Inde): Exchange semester

Pure mathematics Department

INTERESTS

Modern history, Antic history (latin language) Photography

PUBLICATIONS

- [1] M. Massias, A. Gramfort, and J. Salmon. Dual extrapolation for faster Lasso solvers. CoRR, 2018.
- [2] M. Massias, O. Fercoq, A. Gramfort, and J. Salmon. Heteroscedastic multitask concomitant lasso for sparse multimodal regression. In *AISTATS*, 2018.
- [3] **M. Massias**, J. Salmon, and A. Gramfort. Gap safe screening rules for faster complex-valued multi-task group lasso. *SPARS*, 2017.
- [4] M. Massias, , A. Gramfort, and J. Salmon. Résolution rapide de problèmes de type lasso : des règles de safe screening aux working sets. *GRETSI*, 2017.
- [5] **M. Massias**, A. Gramfort, and J. Salmon. From safe screening rules to working sets for faster lasso-type solvers. *CoRR*, abs/1703.07285, 2017.