João Loula

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EDUCATION MSc in Applied Mathematics and Computer Science

2016-

École Polytechnique de Paris

BSc in Electrical Engineering

2013-2016

École Polytechnique de Paris - Universidade de São Paulo

RESEARCH EXPERIENCE

Parietal Team, Inria

Summer 2016

- Paris, France
 - Developed and implemented a novel approach to decoding fMRI data in the time domain using machine learning.
 - Working paper
 - Creation of a toolbox for algorithm implementation
 - Worked on Nilearn, the team's open-source package for machine learning on brain data (Parietal is the creator of many high-profile open-source projects, notably Scikit-learn and Joblib).

Mathematical Neuroscience Team, Collège de France

2015-2016

- Paris, France
 - Performed analysis and mathematical modeling of orientation map data in the cat early visual cortex.
 - Implemented an Artificial Neural Network to model early visual cortex structure.

Automation and Control Lab, Universidade de São Paulo São Paulo, Brazil

2014

• Developed software for approximating shortest paths on manifolds for use in control systems.

PAPERS

Loula, J., Thirion, B., Varoquaux, G. (in preparation). Time-domain fMRI

decoding.

TALKS Nilearn Tutorial, Brainhack Vienna 2016

AWARDS Eiffel Excellence Scholarship 2015-2017

TEACHING English Tutor, École Polytechnique de Paris 2015-2016 EXPERIENCE Linear Algebra Review Classes Universidade de São Paulo 2014 OTHER Technical blog containing neuroscience, machine-learning and math projects:

 ${\tt joaoloula.github.io} \; ; \; Code : {\tt github.com/joaoloula} \\$

 $\textbf{TECHNOLOGY} \ \textit{Programming Languages:} \ \text{Python, C++, MATLAB}$