LEFORT-BESNARD Jérémy

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#Python_Programming #Machine_Learning #Clinical_Data

EDUCATION

2015-2019 **Ph.D** in computational neuroscience (Magna Cum Laude) *RWTH Aachen University, Germany*
Supervision: Prof. Danilo Bzdok, RWTH University
Prof. Danielle S. Bassett, UPENN
Scholarship: International Research Training Group (DFG-IRTG 2150)

2015 **Master** "Neurosciences, Cognition and Psychology" (with honors)
Psychologist title, supervision by the Master "Child psychology" *University of Tours, France*

2013 **Bachelor** in Psychology (with honors) *Bucknell University, USA and University of Tours, France*

SELECTED PUBLICATIONS (PEER REVIEWED JOURNALS)

Lefort-Besnard J., Varoquaux G., Derntl B., Gruber O., Aleman A., Jardri R., Sommer I., Thirion B., Bzdok D. Patterns of Schizophrenia Symptoms: Hidden Structure in the PANSS Questionnaire. *Translational Psychiatry*. 2019
Ridge Regression, SVM, PCA, Random Forest, kNN, Adaptive Boosting
Input data: clinical questionnaire's scores, demographic data
OHBM 2019 Roma abstract presentation

Lefort-Besnard J., Bassett S.D., Smallwood J., Margulies S.D., Derntl B., Gruber, O., Aleman A., Jardri R., Varoquaux G., Thirion B., Eickhoff B.S., Bzdok D. Different shades of default mode disturbance in schizophrenia: Subnodal covariance estimation in structure and function. *Human Brain Mapping*. 2017. 39:644–661
Sparse Inverse Covariance, Lasso, Hypothesis Testing
Input data: fMRI (time-series), MRI (voxels), demographic data
OHBM 2018 Singapor abstract presentation + awarded of the DAAD travel grant

- Recently submitted -

Lefort-Besnard J., Vogeley K, Schilbach L, Varoquaux G, Thirion B, Dumas G, Bzdok D. Patterns of Autism Symptoms: Hidden Structure in the ADOS and ADI-R instruments. Submitted 2020.
K-means clustering, sparse logistic regression, bootstrap confidence interval
Input data: clinical questionnaire's scores, demographic data

Pfundmair M, **Lefort-Besnard J.** Identifying predictive features of islamist radicalization. Submitted 2020.
Sparse logistic regression, Confusion matrix, nested cross validation
Input data: demographic data from German police office

RELEVANT ACADEMIC EXPERIENCE

Since 2019 **POSTDOCTORAL RESEARCHER** on learning predictive models based on behaviors, brain-region and brain-network priors NTHU, Taiwan

2020 **Project presentation** IRTG 2150 conference RWTH Aachen, Germany

2020 **Teacher** "HTML, CSS and JS" NTHU, Taiwan

2019 **Sys Admin** Gitlab instance on Ubuntu server NTHU, Taiwan

2018+2019 T**eacher** "Using Git, Github and creating a science portfolio" RWTH Aachen, Germany, NTHU, Taiwan

2018 **Hackaton** Focus on Pytorch Zurich, Swiss

2018 **Project presentation** IRTG 2150 conference RWTH Aachen, Germany

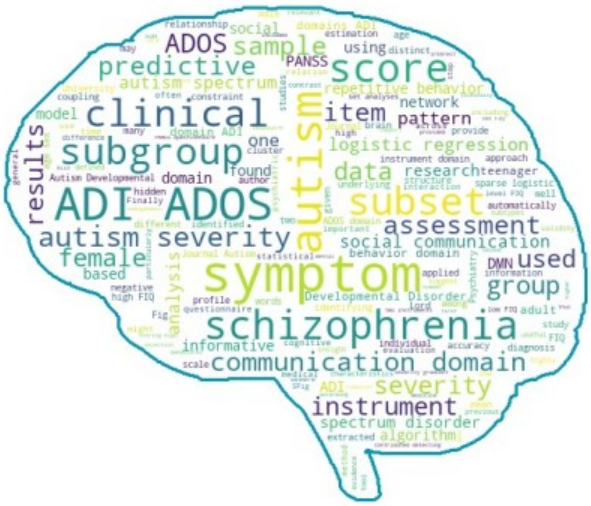
2018 **Poster Presentation** OHBM conference Suntec, Singapore

2017+2018 **Teacher assistant** "Machine learning crash course" RWTH Aachen, Germany

2017+2018	**Teacher** "Introduction to Python"	RWTH Aachen, Germany
2017	**Hackaton** Focus on Pycortex and Pandas hacks	Max Plank Leipzig
2017	**Project Presentation** IRTG 2150 conference	UPENN, USA

SKILLS & OTHER RELEVANT EXPERIENCES

Numbers	| Machine learning/Statistics
Research	| Brain imaging, psychiatry, quantitative neuroscience, personalized medicine
Computer	| Python, R, Matlab, HTML/CSS/JS, Bash scripts, SPSS
OS	| Linux, Mac, Windows
Version control	| Git, Github, Gitlab,
Editor	| Markdown, Latex, Jupyter, VIM, GIMP, Office
Language	| French native, English full working proficiency, some German and Chinese
2013-2015	| Founder and President of ESN Tours (10.000 Euros annual budget)
Since 2016	| Writer on Quora (500.000 content views in English, 250.000 in French, 700 followers)
Hobbies	| I try to run a marathon every 3 years, free (libre) softwares, volunteering



Brain computed using the wordcloud package with my publications as input (https://github.com/JLefortBesnard/Brain_filled_with_words)