Ulysse Klatzmann

Passionate about Large Scale Neuro-Cognitive Modeling

Education

2018–2019   **Master of Science**, *CogMaster, Ecole normale supérieure*, Paris.
- Cognitive Neuroscience

2010–2014   **Master in Engineering**, *Telecom ParisTech*, Paris, *GPA − 3.84*.
- Data Science and Entrepreneurship

Spring 2013   **Undergraduate**, *Columbia University*, New York.
- Theoretical Neuroscience

Academic experiences

2020-2021   **Modeling Global Neuronal Workspace within Large Scale Network**, *NYU*, New York.
- Implementing the Global Neuronal Workspace architecture proposed by Stanislas Dehaene and colleagues within the Large scale framework developed by Xiao-Jing Wang and colleagues, based on the macaque cortex architecture (Kennedy and colleagues). Exploration of the impact of AMPA, NMDA and GABA gating variables ratio on local and global dynamics.
- Tutors : Xiao-Jing Wang & Sean Froudist-Walsh
- Collaborators : Daniel Bliss, Panagiota Theodoni
- Modeling tools : Brian and Pydstool
- Klatzmann, U., Froudist-Walsh, S., Bliss, D.P., Theodoni, P., Mejías, J., Niu, M., Rapan, L., Palomero-Gallagher, N., Sergent, C., Dehaene, S. and Wang, X.J., 2022. A connectome-based model of conscious access in monkey cortex *bioRxiv* 2021.02.22.432173 (2022)

Spring 2019   **Modeling consciousness access non-linearity**, *NeuroSpin*, Paris.
- Modeling the non-linearity of neuron response in the dorsolateral Prefrontal Cortex found in van Vugt et al. data (2018) using a full brain spiking network inspired by Joglekar et al. model (2018) and based on Markov et al. connectivity matrix (2012)
- Tutor : Stanislas Dehaene & Claire Sergent
- Collaborators : Bram van Vugt, Jorge Mejias, Xia-Jing Wang
- Modeling tools : Brian and Alambic distributed computation structure

Spring 2013   **Modeling neuron orientation tuning in V1**, *Columbia University*, New York.
- Modeling the unsupervised specialisation of neurons in Cortex V1, layer 2/3 in a spiking network based on physiological data from Hofer et al. (2011) using Spike-timing-dependent plasticity equations from Clopath et al. (2010).
- Tutor : Claudia Clopath
- Modeling tools : Core Python
- Clopath, Claudia, Jacopo Bono, and Ulysse Klatzmann. "Excitatory to inhibitory connectivity shaped by synaptic and homeostatic plasticity." *BMC Neuroscience* **16**, no. 1 (2015): 1-2.

Entrepreneurial Experiences

2021   **CEO and founder**, *Mediteranean Association for Cognitive Science*.
- Organisation of the Mediteranean Seminar for Consciouness 2021
- 20 Early Career Researchers from various backgrounds, 8 Senior Speakers
- 20k euros budget, Financial support from EBRAINS and the Human Brain Project
- 2 Scientific Popularization videos with high impact YouTubers (Monsieur Phi and Dirty Biology)

2015–2018   **Growth & BI**, *OpenClassrooms*.
- MOOC European leader, 3 500 000 monthly users
- Reshape of the growth strategic model
- Set up from scratch of the Business Intelligence system
- +365% Revenue, +2400% students, two fundraisings, total amount : 53M euros

2012–2014   **CEO and founder**, *Shapter*.
- Online plateform aggregating student reviews on academic courses.
- 7 campuses, 2000+ Students, 50 000 euros raised (Xavier Niel and French State)
- Incubated at ParisTech Entrepreneur, Accelerated at TheFamily Fellowship

2012–2013   **Data Science Intern**, *Work4*.
- Matching engine development (python/C++)
- Reshape of the distributed computed architecture (Celery)
- Matching algorithms : Facebook profiles/ job offers

Technical skills

Programming languages

Main language - python

Other languages - Basic, Cml, C/C++, MySQL, php, Redshift, Latex, Matlab, R

Other programming skills Distributed computing, algorithmic, data structures, large data bases, web programming

Sense of humor

humor of circumstance, running gag, running gag.

Extra activities

Art & Literature
- Authors : M. Kundera, A. Maalouf, I. Asimov, P. Verlaine
- Composers : Phil Glass, Ludovico Enaudi, Steve Reich
- Scientists : A. Einstein, C. Darwin, K. Godel, J. Monod, T. Khun

Travel
- Travel around the Mediterranean sea, from Marseille to middle east
- Silk road, from Paris to X'ian, no plane nor hotel
- Going up the Amazon, from the Atlantic to the Pacific
- Going up the Nile, from Alexandria to Khartoum

Strategy game
- Board games, video games, card games

Sports
- Treks (Corsica, Nepal, Thailand, Norway, Burma, Armenia, Kyrgyzstan, Ecuador)
- Bouldering (7a+ Level)