

Ulysse Klatzmann

Passionate about Large Scale Neuro-Cognitive Modeling

Education

- 2018–2019 Master student, CogMaster, Ecole normale supérieure (ULM), Paris.
 - Cognitive Neuroscience
- Spring 2013 Undergraduate student, Columbia University, New York.
 - Theoretical Neuroscience
- 2010–2014 Master in Engineering, Telecom ParisTech, Paris, GPA 3.84.
 - o Data Science and Entrepreneurship

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
- o Collaborators : Daniel Bliss, Panagiota Theodoni
- o Modeling tools : Brian and Pydstool
- o 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.

- o 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
- o 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.

- o 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).
- o Tutor : Claudia Clopath
- Modeling tools : Core Python
- o 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.

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

2015–2018 Growth & BI, OpenClassrooms.

- o MOOC European leader, 3 500 000 monthly users
- Reshape of the growth strategic model
- Set up from scratch of the Business Intelligence system
- o +365% Revenue, +2400% students, two fundraisings, total amount : 53M euros

2012–2014 CEO and founder, Shapter.

- o Online plateform aggregating student reviews on academic courses.
- o 7 campuses, 2000+ Students, 50 000 euros raised (Xavier Niel and French State)
- o 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

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

Trave

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

Strategy game

o Board games, video games, card games

Sports

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