Curriculum vitae

Coumarane TIROU

30 rue Joseph Chalier
69008 Lyon
0695939930
coumarane.tirou@univ-lyon1.fr

Education

2022 – present	Ph. D. in Cognitive Neurosciences, Lyon Neurosciences Research Center (CRNL)
2020 - 2022	M.A., Fundamental and Clinical Neurosciences, Claude Bernard Lyon 1
	University (UCBL)
2017 - 2020	B.A., Biology, Claude Bernard Lyon 1 University (UCBL)

Research experiences

Jan – Feb 2021 Student Internship

MEMO team – Lyon Neurosciences Research Center (CRNL)

Research on the cognitive neuroscience behind implicit statistical learning.

Research on the possible interactions between neuropsychological tests when assessing executive functions.

Jan – July 2022 Student Internship

EDUWELL team – Lyon Neurosciences Research Center (CRNL)

Research on representational change as a brain mechanism underpinning sequential/statistical learning.

Research on neural replay as a brain mechanism underpinning higher-order (sequence) learning.

Relevant skills

- Non-invasive brain stimulation: experience in administrating repetitive transcranial magnetic stimulation (TMS)
- Magnetoencephalography (MEG): experience in administrating, recording, and analyzing MEG data

- Electroencephalography (EEG): experience in administrating, recording, and analyzing EEG data
- Neuropsychological tests: experience in administrating and analyzing standardized neuropsychological tests (Wisconsin sorting card test, Go/ No-go test, fluency task, counting span task, Attentional Network Test, verbal fluency tasks).
- Programming skills:
 - o Python: good level of programming skills
 - Data preprocessing (ICA, PCA, Epochs generation)
 - Multivariate pattern analysis (MVPA)
 - Representational similarity analysis (RSA)
 - Advanced statistical analysis
 - Figure plotting (Matplotlib, Seaborn)
 - Statistical analysis skills: good level of data analysis skills for behavioral data such as reaction times and accuracy in R, SPSS, and JASP.

Languages

- French: native proficiency
- Tamil: native proficiency
- English: professional working proficiency
- German: elementary level proficiency

Non-scientific interests

- Martial arts (Karate, Japanese kickboxing)
- Fitness
- Swimming
- Cinema (American, French, Asian)
- Music (Hip-hop, Alternative, Electronic, Rock, Classical)