# Allain-Thibeault FERHAT, Ph.D

## **Research Scientist**

June 10<sup>th</sup> 1988 (35) at@ferhatberland.com +33 6-60-62-31-89

https://ferhatberland.com/

### **PROFILE**

Experienced project manager and data scientist with a solid background in scientific research from prestigious institutions. Expertly skilled in leading and coordinating projects, utilizing a unique blend of scientific knowledge and management acumen to drive successful outcomes in diverse environments. Seeking a challenging role to apply my expertise and contribute to the success of projects.

### AREA OF EXPERTISE

### **Management & Communication skills**

- Project management
- Team leader & Mentoring
- Adaptability & Initiative
- Teamwork & collaboration
- Public communication •Technical communication

- **Informatics skills** • Scientific coding:
- Machine learning
- Data collection & analyze

- R, Python, Matlab, SQL Scientific skills
- Statistical modelling
- Data visualization
- Statistics (Bayesian frequentist)

Scientific watch

• Problem solving

- Experimental design & analysis Clinical ethic accreditation • Pharmacologie

  - Microscopy

### PROFESSIONAL EXPERIENCE

### Research scientist • Columbia University

2020-2023

Zuckerman Institute • Cognitive neuroscience

New-York, USA

- Characterized cognitive mechanisms and neural basis of hierarchy
- Led a project with cutting edge technology and international collaboration
- Mentored undergraduate and graduate students
- International scientific oral communication
- Contributed to national grant writing (granted) and scientific papers revisions
- Worked with Bayesian model of model-free/ model-based reinforcement learning

## **Graduate researcher & research scientist • Institute Pasteur**

2014 - 2019

*Neuroscience Department* 

Paris, France

- Characterized animal models for autism spectrum disorder at behavioral, structural and genetic level for new therapeutic target
- Led a project with international collaboration
- Mentored undergraduate and graduate students
- International scientific oral communication
- Designed new behavioral tasks to study social interactions in rodents
- Identified new therapeutic targets for autism spectrum disorder

### Research assistant • University of Leeds

The Astbury Centre • Molecular biology

Leeds, UK

2009-2012

2012-2014

Paris, France

Paris. France

• Reviewed literature about causes of Alzheimer Disease

2012

### **EDUCATIONS & CERTIFICATIONS**

### 2023 Certification: Data Science & Neural Networks and Deep Learning Online • Coursera • IBM & DeepLearning.AI Ph.D. Neurobiology. 2014-2014 • <u>Université Paris-Cité</u> • Graduated magna cum laude. Paris, France

## Certification in science popularization & journalism,

2015 • University of Sorbonne Paris Cité Paris, France

### Certification in bio-statistics applied to live science,

2016 • Institut Pasteur, Paris • Frequentist statistics approach using R Paris. France

### M.S. / Master, Neuroscience and cell signaling,

• University of Paris-Saclay • minor in behavior and cognition

## B.S. / Licence, Biological science,

• University of Paris-Saclay • minor in neuroscience, graduated in the top 5% of the class.

### INTERESTS & SKILLS

Language: French (Native); English (Professional)

**Software:** R studio (Rstan, Rmarkdown), Jupyter, Spyder, MATLAB (EEGLab, Fieldtrip), Image J, Microsoft Office. Illustrator, Cytoscape

**Interests:** Arduino and Raspberry pi-based DIY, Tabletop roleplaying game (group management), Hiking, Bouldering, Cooking, Bread making and Culinary fermentations

## • Technical accreditation writing

- Grant writing
- Database management
- Large dataset analysis (Omics, Electroencephalograms, etc.)

## SELECTED PUBLICATIONS & COMMUNICATIONS

### Written communications

• Ferhat et al, 2023

Front Mol Neurosci

doi: 10.3389/fnmol.2023.1139118

• Ferhat et al., 2022 Journal of Cog. Neurosci

doi: 10.1162/jocn a 01823

• Ey, **Ferhat** et al, 2017 Front Mol Neurosci

based

countervailing

doi:10.3389/fnmol.2018.00365

Oral communications

2021. Can monkeys make rule-

decisions

**2020•** Reward-biased transitive

associations? • Neuromatch

inference task • Neuromatch

despite

reward