

## JOB DESCRIPTION

### CONTEXT

We are looking for a MSc intern to work with our team in the use of statistical physics and dynamical systems theory for the development of data-driven approaches for the analysis of inter-individual variability in animal behavior. This project will be done within the context of the ANR project FORE-SIGHT, which aims to frame behavioral variability as an adaptive feature in unpredictable environments, and understand how neuromodulation may drive the emergence of behavioral variability throughout development.

The MSc intern will be part of the SIBBIL team and will have the opportunity to interact with PhD students and postdocs within an interdisciplinary and international context.

### MAIN MISSIONS

Reporting to Antonio Carlos Costa ([website](#)), the Msc intern will be responsible for the following tasks:

- *Benchmarking data-driven techniques for measuring distances between dynamical systems' observations*
- *Establishing the strengths and limits of the existing approaches*

### PROFIL

- BSc in Physics, computer science or applied mathematics

### KNOW-HOW

- *Experience in modelling time series data is a plus*

### KNOWLEDGE

- *Programming skills: python is a plus*
- *Good English level*
- *Knowledge of statistical physics, dynamical systems and machine learning*

### SOFT SKILLS

- *Motivated, curious*
- *Good communicator*

*The Brain Institute is committed to combating all forms of discrimination. We guarantee an inclusive and respectful working environment for all diversities.*

*All our positions are open to individuals with disabilities.*

**Send your application (CV + recommendation letter) to [antonio.costa@icm-institute.org](mailto:antonio.costa@icm-institute.org)**