# Felipe Cybis Pereira

BSc in Brazil - MSc in France

55 rue Greneta, 75002, Paris, France

【 (+33) 6 02 17 62 62 ☐ felipe.cybispereira@gmail.com ☐ FelipeCybis ☐ Felipe Cybis Pereira



### Physics for Medicine Paris, Inserm, ESPCI Paris, PSL, CNRS

Paris, France

PHD CANDIDATE RESEARCH INTERN

September 2021 - Present February 2021 - July 2021

- Adviser: Mickaël Tanter, PI, and Sophie Pezet, PhD.
- Focus: Spatial navigation in rats using functional ultrasound imaging.
- Techniques: Functional Ultrasound imaging Spatial navigation Rodent's brain imaging Animal behavior and cognition Python -3D design conception (CAD) - Ultrafast Ultrasound

#### Harvard University, Rogulja Lab at Harvard Medical School

Boston, USA

RESEARCH INTERN

May 2019 - August 2019

- Adviser: Dragana Rogulja, PI, and Alexandra Vaccaro, PhD.
- Focus: Insights in sleep deprivation in *Drosophila melanogaster*.
- Techniques: Drosophila melanogaster rearing Immunostaining Confocal microscopy Ethological analysis Survival and Dietary assays - Drosophila Activity Monitoring (DAM) system

**ICONEUS** Paris, France

**R&D INTERN** July 2018 - December 2018

- Adviser: Mickaël Tanter, PI, and Bruno Osmanski, PhD.
- Focus:: Code optimization for transcranial multiplane wave ultrasound imaging.
- Techniques: Plane wave and Multiplane wave ultrasound imaging Power Doppler imaging Brain connectivity MATLAB Small animal brain imaging

## **Education background**



#### **BioMedical Engineering Master**

Paris, France

MASTER'S DEGREE IN BIOENGINEERING AND NEUROSCIENCES

September 2020 - August 2021

- Scholarship student for the PSL Graduate Program in Life Sciences.
- · Courses bridging the interface of engineering and neurosciences ranging from Neurophysiology and Drug Design to Sensory and Motor supplementation to Deep learning and Neuroimaging.
- Grade A (mention Bien).

#### **ESPCI Paris - PSL University**

Paris, France

MASTER'S DEGREE IN ENGINEERING FOCUSED IN BIOTECHNOLOGY

September 2016 - August 2019

- Michelin Excellency scholarship student in a double degree program with UFSC University in Brazil.
- Final year covering the bioengineering interface with Medical Imaging, Synthetic Biology, Biophysics and Big Data courses.
- Grade A+ (mention Très Bien).

#### Universidade Federal de Santa Catarina (UFSC)

Florianópolis, Brazil

BACHELOR'S DEGREE IN CHEMICAL ENGINEERING

March 2014 - March 2020

- Initiated a double degree agreement with the French Grande Ecole ESPCI Paris.

## Skills 😚

#### **Programming**

- Scientific Python: Neuroimaging packages (Nipy suite, BrainGlobe), Machine learning packages (scikit-learn).
- General Python: Sphinx documentation and examples, unit testing, linting and formatting, pre-commit hooks.
- Version control: Intermediate to advanced usage of Git and GitHub as VCS.
- Intermediate knowledge on prototyping in Arduino and Raspberry Pi.
- Intermediate knowledge on text editing softwares such as  $\LaTeX$  and  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$  and  $\Tau$  are  $\Tau$
- Rudimentary knowledge on shell scripting, JavaScript and Rust.

#### Spoken languages

• Portuguese (Native), English, French, Spanish

## Extracurricular activities



- Volunteer math teacher in community project involving university preparation courses, 2019.
- International Students Representative at ESPCI Student's Union (Bureau des Élèves), 2017-2018.
- Marketing Director of the Chemical Engineering Athletics Academic Association (ATEQA), 2015.
- Played tennis for almost 10 years while a kid/teen in the biggest international junior championships (Prince Cup, Orange Bowl, Banana Bowl, COSAT circuit).