



Raphaël Truffet

PhD - born in 1995

Professional experience

- 2021-2022 **ATER**, ENS Rennes, Rennes, France.
1-year position of teaching and research.
- 2018-2021 **PhD**, *Empenn Team*, IRISA, Rennes, France.
Acquisition and reconstruction of microstructure parameters of the cerebral white matter under sparsity constraints.
- 2021-2022 **Teaching**, *Agregation*, ENS Rennes, Rennes, France.
Correcting students exams at Master level.
- 2019-2021 **Teaching**, *Algorithmics*, ENS Rennes, Rennes, France.
Supervising tutorial classes of basics in Algorithmics.
- 2019-2020 **Teaching**, *Complexity and computability theory*, ISTIC, Rennes, France.
Supervising practical work of computability theory in Scala.
- 2018-2020 **Teaching**, *Software engineering*, ISTIC, Rennes, France.
Supervising practical work of software engineering in Scala.
- 2018 **Research internship**, *VisAGes Team*, IRISA, Rennes, France.
Compressed sensing in diffusion MRI for the reconstruction of microstructure parameters of the cerebral white matter.
- 2017 **Research internship**, *ODYCCEUS Project*, MPI MIS, Leipzig, Germany.
Dynamical networks for modeling opinion dynamics in social networks.
- 2016 **Research internship**, *VisAGes Team*, IRISA, Rennes, France.
Optimizing the acquisition for parameter estimation in diffusion MRI.
- 2015–2016 **Teaching**, *École normale supérieure de Rennes*, Rennes, France.
Unplugged activities in primary schools.

Education

- 2015–2018 **"Grande École"**, *École Normale Supérieure de Rennes*, Rennes, France.
Formation in theoretical and applied computer science.
- 2013–2015 **"Classe Préparatoire aux Grandes Ecoles" - MPSI/MP* - Computer Science option**, *Lycée du Parc*, Lyon, France.
Scientific preparation to the competitive entrance exam of french "Grandes écoles" in mathematics, physics and computer science.
- 2013 **"Baccalauréat S"**, *Lycée Pontus de Tyard*, Chalon sur Saône, France.
"Very Good" Mention.

Computer skills

- good Python, Scala, C/C++, OCaml
- notions Matlab, Assembler

Languages

fluent **French**, *Mother tongue*.
good **English**.
notions **Spanish**.

Publications

- 2021 **Rafael-Patino et al.**, *The Microstructural Features of the Diffusion-Simulated Connectivity (DiSCo) Dataset.*, In International Workshop on Computational Diffusion MRI, Online conference.
- 2021 **Rafael-Patino et al.**, *The diffusion-simulated connectivity (DiSCo) dataset.*, Data in brief, 38, 107429..
- 2021 **Girard et al.**, *A novel in silico phantom for microstructure, tractography and quantitative connectivity estimation.*, ISMRM, Online conference.
- 2020 **Truffet et al.**, *An evolutionary framework for microstructure-sensitive generalized diffusion gradient waveforms*, International Conference on Medical Image Computing and Computer Assisted Intervention, Lima, Peru.
- 2019 **Truffet et al.**, *Optimal selection of diffusion-weighting gradient waveforms using compressed sensing and dictionary learning*, ISMRM, Montréal, Canada.

Other

2013 **Driving License**.

Other activities

- 2019-2021 **Science popularization**, *Raphaël Truffet - Sciences-Métrages*, Rennes, France.
Creating my own Youtube channel for science popularization and short movies.
- 2019-2021 **Administrative**, *Nicomaque*, Rennes, France.
President of the PhD students association Nicomaque, that organizes several events for PhD students in science popularization and connecting PhD students with companies and entrepreneurs.
- 2020 **Administrative**, *Sciences en cour[t]s*, Rennes, France.
Coordinating and co-organizing this festival of short movies of science popularization. I also animated the ceremony
- 2020 **Science popularization**, *Ma thèse en 180 secondes (MT180)*, Rennes, France.
French equivalent of 3-minute thesis, popularization my PhD subject in 3 minutes on stage.
- 2020 **Administrative**, *Brainhack Grand Ouest*, Rennes, France.
Co-organizing and animating two days of a collaborative hackaton and presentations
- 2019 **Science popularization**, *Sciences en cour[t]s*, Rennes, France.
Writing and directing a short movie of science popularization.
- 2016-2018 **Drama**, *Muses & Co*, ENS Rennes, Rennes, France.
Great implication in the Music-Hall project of my school in 2016-2017 (acting), and in 2017-2018 (writing, staging and lighting).
- 2017-2018 **Circus**, *Circus club*, ENS Rennes, Rennes, France.
Leading the circus club of my school. Teaching and practising slackline, unicycling, juggling...
- 2008-2013 **Drama**, *Conservatory*, Chalon sur Saône, France.
Following drama lessons. Several representations.