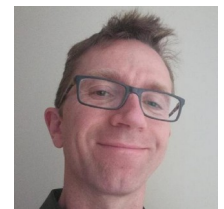


Pierre-Louis (Pilou) Bazin

(he/him)

Short CV



Personal information

Address: Lage Morsweg 73
Leiden
The Netherlands

Nationality: French

DOB: 24/01/1975

Married, two children

Education & Training

- Electrical engineering diploma (Supélec)
- Masters of Signal processing and dynamical systems (University Paris XI)
- PhD in Image processing and Computer Vision (Inria and University Paris XI)
- Postgraduate training in Neuroscience (Johns Hopkins University)

Professional experience

- 2023 – now Scientific consultant at Full brain picture Analytics, Leiden
- 2018 – 2023 Senior Scientist at University of Amsterdam
- 2017 – 2018 Senior Scientist at the Netherlands Institute for Neuroscience, Amsterdam
- 2011 – 2017 Senior Researcher at the Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig
- 2003 – 2011 Research associate, instructor and group director at the Johns Hopkins University, Baltimore MD

Publications

96 journal articles
52 conference papers
4 book chapters
H-index 44

Open science

5 datasets
4 toolboxes
Brainhack events

Grant support

4 international
6 national
1 fundation
2 internal

Research work

My research is centered on the development of computational modeling techniques to better understand neural anatomy and function underlying human behavior. My work has been mostly focused on magnetic resonance imaging (MRI) at high field and ultra-high field. In methodological and applied works, I have advanced the study of laminar MRI and fMRI, in-vivo imaging of myelin and iron in the brain, mapping of the cerebellar cortex and the neurovasculature, and parcellation of the subcortex. With this strong foundation in computational neuroanatomy, I have recently studied the impact of white matter pathology on cognition and health, the anatomical basis of functional connectivity gradients, and the effects of neural plasticity onto MRI. My latest efforts have focused more closely on building detailed models of the structure and function of the subcortex, an essential yet understudied region of the human brain, by bridging scales from microscopy to systems architecture and cognitive models. These efforts are reflected not only in publications in international journals and conferences, but also in Open Science output such as open-source software packages and open data sets.

Mentoring

2 Postdocs
8 PhDs (co-promotor)

Invited seminars:

27 institutions
2 workshops

Organizing activities

Subcortex workshop (2021)
Brainhack Amsterdam (2017)
Neuroimage special issue editor (2021-2023)

Teaching

- Advanced Neuroimaging (master course, 2019-2022)
- Introduction to Neuroscientific Methods and Brain Anatomy (master lectures, 2018-2022)
- Neurophysiology: Introduction to Electrophysiology and Imaging (master lecture, 2022)
- Neuroplasticity (master lectures, 2015)
- Measurement and Analysis of Structural and Functional Imaging Data (PhD course, 2014-2015)
- Medical Image Processing (professional course, 2008-2010)
- Medical Image Analysis (master lectures, 2006-2010)
- Medical Imaging Tutorial (software tutorials, 2004-2008)

Languages

- French: fluent
- English: fluent
- Dutch: intermediate
- German: intermediate
- Japanese: basic
- Spanish: basic

Computer skills

- Java programming
- Python scripting
- Neuroimaging software
- 3D visualization
- Linux environments
- Github code management
- Video editing

Analytic skills

- Mathematical modeling
- Bayesian statistics
- Machine learning

Other activities

- Bouldering
- Parkour & freerunning
- Boardgames