



ANTONI BERTOLIN MONFERRER

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[Personal page](#)

EDUCATION

PhD <i>Computational Neuroscience</i> University of Bonn	2022 – Ongoing (Aug. 2025) Bonn, Germany
M. Sc. <i>Evolutionary Genetics</i> University of Edinburgh	2021 – 2022 Edinburgh, UK
M. Sc. <i>Integrative Neuroscience</i> University of Edinburgh	2020 – 2021 Edinburgh, UK
B. Sc. <i>Biochemistry</i> Universitat de Barcelona	2016 – 2020 Barcelona, Spain
IB & Spanish Baccalaureate Agora Lledo International School	2014 – 2016 Castellon, Spain

RELEVANT WORK EXPERIENCE

POSITIONS

Doctoral Researcher Universitätsklinikum Bonn Universitätsmedizin der JGU Mainz	2022 – Ongoing (Aug. 2025) 2022 – 2023, Germany 2023 – 2025, Germany
<ul style="list-style-type: none">• Greatly increased the speed, and eliminated previously undetected bugs in the refactor of a code-base.• Designed, added and integrated major features and a new framework in the code-base.• Tested properly for all new features before integrating the changes.• Developed my own frameworks for neural simulations.	
Teacher in M. Sc. Neuroscience course on Python programming University of Bonn	2024, 2025 Bonn, Germany
Student Assistant in Research University of Edinburgh	2020 – 2021 Edinburgh, UK
<ul style="list-style-type: none">• Performed data analysis on labelling data from Neuropixels recordings.• Built data pipelines and analysis tools for human classification problems.• Developed neural network-based decoders for Neuropixel data analysis.	
Student Assistant in Research University of Barcelona	2018 – 2020 Barcelona, Spain
<ul style="list-style-type: none">• Performed data analysis on agonist and antagonist experiment data, WB data, protein sequence data.	

PROJECTS

Development of synaptic plasticity models <i>Python</i> University of Bonn	2024
Plasticity model framework integration in Spiking Neural Networks code-base <i>C/C++</i> University of Mainz	2023 TchuSNNNet
Spiking Neural Networks code-base refactor <i>C/C++</i> University of Mainz	2023 TchuSNNNet

Analysis of genetic covariance and the evolution of asynchronous senescence R University of Edinburgh	2022
Analysis of neural recordings during behavioural tasks using CNNs Python University of Edinburgh	2021
Analysis of detection patterns in professional labelling of Neuropixel data Python University of Edinburgh	2021

HONORS AND AWARDS

Gold (1st) in Regional Biology Olympiad Price for being 1st in the competition	2016 Spain
Gold (1st) in Regional Chemistry Olympiad Price for being 1st in the competition	2016 Spain
Bronze (7th) in National Chemistry Olympiad Price from being from 7th to 10th in the competition	2016 Spain
Silver (8th) in National Biology Olympiad Price from being from 5th to 8th in the competition	2016 Spain
Silver (10th) in Iberoamerican Biology Olympiad Price from being from 7th to 14th in the competition	2016 Brazil

WORKSHOPS AND CONFERENCES

Building a Raspberry Pi Cluster	Bonn, 2025
CppCon	Online, 2023
Emergent AI Winter School	Nierstein, 2023
ISRC-CN3	Online, 2021 & Derry/Londonderry, 2023
Bernstein (poster)	Berlin, 2023
Neuromatch	Online, 2023
III EQS	Barcelona ,2021

LANGUAGES

Spanish (Native), Catalan (Native), English (C1-C2), German (A2), French (A1)

COMPUTER SKILLS

Programming languages: C/C++, C, Python, Julia, R, Lua, Bash, Zsh, Powershell, MATLAB, Mathematica
Web development: HTML, CSS
Document Creation: Latex, Libreoffice, Markdown
Graphic design: Inkscape, Graphpad Prism, Matplotlib, Seaborn
Version control: Git
Other: CMake, Make, SLURM, OpenSSH, GraFit, Phy, SPSS

PRIVATE PROGRAMMING PROJECTS

ENIGMA machine emulator Python	github.com/tobe2098/denigma
Jaipur game emulator and Julia library C	github.com/tobe2098/JaipurEmulator
C mutex interface library C	github.com/tobe2098/c.the_mutex
Memory allocator library C - In progress	github.com/tobe2098/aberlloc

Saturday 1st March, 2025

[Bonn, Germany]



Signature