Nicolas Gravel, Ph.D.

Scientist passionate about applied research & soft/hardware development

+49 163 165 2969
Berlin, Germany

nicolas.gravel@gmail.com

EXPERIENCE

Freie Universität, Berlin, DE

Postdoctoral Researcher in Neural Dynamics

APRIL 2019 - PRESENT

- Jointly affiliated with the **Ernst Strüngmann Institute for Neuroscience, Frankfurt**
- Development of a high performance data analysis pipeline using **parallel computing resources**
- Applying **Machine Learning** techniques to analyze Human Connectome Project fMRI and electrophysiological data

Groningen University Medical Center, Groningen, NL

Doctoral Researcher in MRI techniques and fMRI analysis

JUNE 2013 - SEPTEMBER 2018

- Developed novel **anatomical MRI techniques and analyses**
- Mentored 4 MA and 2 PhD students
- Gained further experience as a visiting researcher:
  - Implementation of fMRI compatible eye-tracking system, *Universidad Católica de Chile, CL*
  - Brain-network modeling and computational connectomics, *Computational Neuroscience Group, Universidad Pompeu Fabra, Barcelona, ES*

Universidad Católica de Chile, Santiago, CL

Research Assistant in Electrophysiological Recordings and Closed-Loop Control Equipment for Behavioral Study

MARCH 2010 - MARCH 2012

- Developed embedded applications using LabView, ATMEGA microcontrollers and field programmable gate arrays (FPGA)

EDUCATION

University of Groningen, The Netherlands — Ph.D.

Behavioral and Cognitive Neuroscience

AUGUST 2013 - APRIL 2018

- Thesis: The Neuroanatomical Organization of Intrinsic Brain Activity Measured by 7T fMRI in the Human Visual Cortex
- Coursework in neuroimaging, data analysis and neural networks

Universidad de Chile, Santiago, Chile — L.Sc.

Biological Sciences,

MARCH 2004 - DECEMBER 2009

- Specialization in Neuroscience
- Coursework in programming, instrumentation and biostatistics

SKILLS

Computational modeling, artificial intelligence, hardware and software development (Python, Matlab, others)

Instrumentation, microcontrollers, data acquisition & visualization

Analog and digital electronics, printed circuit board design

Education, basic and applied research, sustainable technologies

AWARDS

Alexander von Humboldt fellowship for post-doctoral research, **DE**

Advanced Human Capital Scholarship for post-doctoral research, **CL**

Professor Mulder Stitching Scholarship for doctoral research, **NL**

Advanced Human Capital Scholarship for doctoral research, **CL**

Abel-Tasman Scholarship for young talents in the biomedical sciences, **NL**

LANGUAGES

Spanish, *native*

English, *native*

German, *intermediate* (B.2)

PUBLICATION LIST

https://bit.ly/ngravel