

Nicolas Gravel, Ph.D.

Scientist passionate about applied research & soft/hardware development

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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 **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 microcontrollers and integrated circuits (ATmega, FPGA, Intan amplifiers & A/D chips)

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, accessibility

AWARDS

Alexander von Humboldt fellowship for postdoctoral 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>