

Rik L.E.M. Ubaghs

🌐 <https://github.com/rlemubaghs> 🌐 rlemubaghs.com ✉ rlem.ubaghs@gmail.com

📍 Zurich, Switzerland ☎ +31 6 51 45 01 60

Education

ETH Zurich, Zurich, Switzerland

July 2017 - June 2023

Ph.D. Neurotechnology

University of Amsterdam, Amsterdam, the Netherlands

Sept 2014 - June 2016

Research Master Brain and Cognitive Sciences, Cum Laude

Maastricht University, Maastricht, the Netherlands

Sept 2011 - June 2014

Bachelor Psychology and Neuroscience, Cum Laude

Skills

Languages: Dutch (Native), English (Fluent), German (Basic)

Programming: Python, Matlab, Rust, R, SQL

Skills: Microscopy, Industrial Design and Manufacturing, Biomedical Imaging

Research Positions

Institute of Neuroinformatics, ETH Zurich, Zurich, Switzerland

June 2023 - Current

Postdoc

- Development of a sentiscope for border detection and tumor removal during invasive surgery.

Institute of Neuroinformatics, ETH Zurich, Zurich, Switzerland

July 2017 – June 2023

Ph.D. Candidate

- Development of a MRI compatible florescence microscope (full-cycle product design).

- Design of a paradigm to combine microscopy and MR imaging methods in awake rodents.

- Design of data pipelines for multi-modal data analysis.

Center for Neuroengineering, Duke University, Durham, USA

Jan 2016 – Sept 2016

Visiting Scientist

- Development of hybrid brain decoding methods in Non-human Primates.

Swammerdam Institute for Life Sciences, Amsterdam, The Netherlands

Aug 2015 – Dec 2015

Internship

- Experimental design for sensory integration in rodents.

- Design of data analysis methods for high dimensional data.

Spinoza Center for Neuroimaging, Amsterdam, The Netherlands

Nov 2014 - Dec 2015

Junior Research Scientist

- MR operator.

- Design and supervision of several large research projects.

Industry Positions

Agora Technology, Maastricht, The Netherlands

Nov 2016 - Feb 2018

Co-founder, CEO

- Agora Technology builds data solutions to streamline/automate daily operations in the medical sector.
- Creation, maintenance, and analysis of large-scale data solutions using advanced machine learning approaches.

Medtronic/Maastricht University Medical Centre, Maastricht, The Netherlands

Dec 2016 - Jun 2017

Data Scientist

- Design of a pipeline to process medical procedural data.
- Development of a centralized database for surgical protocols.

Extracurricular Positions

Natural Movements, Heerlen, The Netherlands

March 2007 - May 2012

Co-Founder

- Natural Movements is a non-profit organization that aims to engage underprivileged youth in the local community through behavioral coaching and physical education.

Honors

Committees:

Educational Committee, IIS, University of Amsterdam

Sept 2014 - June 2015

Vice-President Student Council, FPN, Maastricht University

Sept 2012 - June 2013

Program Committee, FPN, Maastricht University

Sept 2012 - June 2013

Grants:

Hendrik Muller Memorial Fund

2016

Bekker - La Bastide Memorial Fund

2015

Vrijvrouwe van Renswoude Fund

2015