## PERSONAL INFORMATION

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|---|---|
| Last name: | **Karamanlis** |
| First name: | **Dimokratis** |
| Nationality: | Greek |
| Date of birth: | November 28, 1991 |
| Position: | Postdoctoral researcher |
| Email: | dimokaramanlis@gmail.com |
| Website: | https://dimokaramanlis.github.io/ |
| GitHub: | dimokaramanlis |
| ORCID: | 0000-0002-9469-5020 |

## EDUCATION & TRAINING

**05/2022**

**CAJAL Advanced Neuroscience Training**
Neural circuit basis of computation and behaviour (France)
Directors: Fritjof Helmchen, Andreas Frick, Cyril Herry
Project supervisors: Lisa Roux, Naoya Takahashi

**10/2017 – 02/2022**

**PhD in Neuroscience**
International Max Planck Research School for Neurosciences (Germany)
Thesis: How nonlinear processing shapes natural stimulus encoding in the retina
Supervisor: Tim Gollisch / Defense date: 23/02/2022
Grade: *summa cum laude*

**10/2015 – 05/2017**

**Master in Neuroscience**
International Max Planck Research School for Neurosciences (Germany)
Thesis: Spatial integration in mouse retinal ganglion cells
Supervisor: Tim Gollisch
Grade: 1.1 (1.0 down to 5.0)

**10/2011 – 08/2017**

**Online coursework in Mathematics, Physics and Machine Learning**
Selected courses: logic, calculus, linear algebra, statistics, electricity and
magnetism, electrical circuits, statistical thermodynamics, artificial intelligence,
computational neuroscience, deep learning
Platforms: Coursera, edX
Statements of accomplishment are available on request

**09/2009 – 06/2015**

**Doctor of Medicine**
Aristotle University of Thessaloniki (Greece)
Grade: 8.11/10

## EMPLOYMENT HISTORY

**02/2023 –**

**Postdoctoral researcher**
Laboratory of Sami El-Boustani, University of Geneva (Switzerland)

**04/2022 – 12/2022**

**Postdoctoral researcher**
Laboratory of Tim Gollisch, University Medical Center Göttingen (Germany)

**05/2017 – 03/2022**

**Graduate researcher**
Laboratory of Tim Gollisch, University Medical Center Göttingen (Germany)

## PRIZES, AWARDS, AND FELLOWSHIPS

| | |
|---|---|
| 09/2023 – 08/2024 | **Swiss Government Excellence Scholarship** for postdoctoral research |
| 08/2021 | **Best poster award**, Retinal Circuits Symposium (online) |
| 01/2018 – 09/2020 | **Boehringer Ingelheim Fonds PhD fellowship** |
| 11/2018 | **Nomination for the Lindau Nobel Laureate Meeting (Physics)** by the Göttingen Graduate Center for Neurosciences, Biophysics, and Molecular Biosciences |
| 10/2015 – 05/2017 | **Study scholarship for graduates of all disciplines** German Academic Exchange Service (DAAD) |
| 03/2009 | **Bronze medal in National Mathematical Olympiad** Hellenic Mathematical Society |

## TEACHING

| | |
|---|---|
| 05/2019 | **Course instructor (for graduate students)** Introduction to spike-train analysis with Python Göttingen Graduate Center for Neurosciences, Biophysics, and Molecular Biosciences (Germany) |
| 03/2019 | **Course instructor (for Master students)** Vision (retina, lateral geniculate nucleus, primary visual cortex) International Max Planck Research School for Neurosciences (Germany) |
| 03/2017 – 04/2018 | **Rotation project supervision (for Master students)** Two-month projects on analysis of multielectrode-array data from the retina International Max Planck Research School for Neurosciences (Germany) |
| 05/2010 | **Course instructor (for medical students)** Personal Health Record module of Medical Informatics I course Aristotle University of Thessaloniki (Greece) |

## CONFERENCE CONTRIBUTIONS

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|---|---|
| 03/2022 | **COSYNE 2022**, Poster (Portugal) |
| 08/2021 | **Retinal Circuits Symposium**, Poster (online) |
| 09/2019 | **European Retina Meeting 2019**, Poster (Finland) |
| 06/2019 | **Rank Prize Funds Symposium**, Talk (UK) |
| 03/2019 | **13th Meeting of the German Neuroscience Society**, Talk (Germany) |
| 09/2018 | **Bernstein Conference 2018**, Poster (Germany) |
| 10/2017 | **European Retina Meeting 2017**, Poster (France) |
| 03/2017 | **12th Meeting of the German Neuroscience Society**, Poster (Germany) |
| 07/2012 | **Protection and Restoration of the Environment XI**, Talk (Greece) |

## SELECTED CONFERENCES, WORKSHOPS, AND RESEARCH TRAINING

| | |
|---|---|
| 06/2019 | **69th Lindau Nobel Laureate Meeting on Physics** (Germany) |
| 05/2016 – 06/2016 | **Research in theoretical neuroscience** with Viola Priesemann (Germany) |
| 10/2014 | **Workshop on Analysis and Models in Neurophysiology** (Germany) |

| 09/2013 | **11th Summer Course on Computational Neuroscience** (Germany) |
| 10/2011 – 10/2013 | **Research in neurophysiology** with Efstratios Kosmidis (Greece) |
| 03/2012 – 10/2012 | **Research in participatory sensing** with Kostas Karatzas (Greece) |
| 10/2011 – 10/2012 | **Research in medical informatics** with Panagiotis Bamidis (Greece) |

## PUBLICATIONS & PREPRINTS

**Karamanlis D**, Khani MH, Schreyer HM, Zapp SJ, Mietsch M, Gollisch T (2023).
Natural stimuli drive concerted nonlinear responses in populations of retinal ganglion cells.
bioRxiv, doi: 10.1101/2023.01.10.523412.

Nitsche S, Khani MH, **Karamanlis D**, Erol YC, Zapp SJ, Mietsch M, Protti DA, Rozenblit F, Gollisch T (2022).
Diversity of Ganglion Cell Responses to Saccade-like Image Shifts in the Primate Retina.
bioRxiv, doi: 10.1101/2022.08.12.503725.

**Karamanlis D**, Schreyer HM & Gollisch T (2022).
Retinal encoding of natural scenes.
Annual Review of Vision Science, 8:171-193.

Jian K Liu, **Karamanlis D** & Gollisch T (2022).
Simple model for encoding natural images by retinal ganglion cells with nonlinear spatial integration.
PLoS Computational Biology, 18(3):e1009925.

**Karamanlis D** & Gollisch T (2021).
Nonlinear Spatial Integration Underlies the Diversity of Retinal Ganglion Cell Responses to Natural Images.
Journal of Neuroscience, 41(15):3479-3498.

**Karamanlis D**, Tzitzis P, Bratsas C & Bamidis P (2012).
Personal health records in the preclinical medical curriculum: modeling student responses in a simple
educational environment utilizing Google Health.
BMC Medical Education, 12:88.