# Christos Karaneen (Karageorgiou Kaneen)

Neuroscience & AI Researcher, Software Engineer

github.com/ckaraneen

linkedin.com/in/ckaraneen

X.com/ckaraneen

# 

### **EDUCATION**

• New York University

Ph.D., Cognitive Science, Department of Psychology

Sept. 2025 - (ongoing)
Heraklion, GR

New York City, USA

Oct. 2021 - Feb. 2024

University of Crete
M.Sc., Neuroscience, School of Medicine

Technical University of Crete

 $M. Eng., \ School \ of \ Electrical \ \mathcal{E} \ Computer \ Engineering$ 

Chania, GR

Sept. 2014 - Dec. 2019

### RESEARCH EXPERIENCE

Chklovskii Lab, [ ] FLATIRON Flatiron Institute

Neuroscience & AI Researcher (Summer Research Intern)

New York City, USA

May 2025 - Aug. 2025

Banerjee Lab, CSH Spring Harbor Laboratory Cold Spring Harbor Laboratory

Neuroscience & AI Researcher (NeuroAI Research Intern)
Explored how learned behavior evolves into instinct. See poster.

Cold Spring Harbor, USA

June 2024 - Nov. 2024

Kording Lab, University of Pennsylvania

Neuroscience & AI Researcher (Visiting Scholar)

Dec. 2022 - March 2023

Investigated how meta-learning synaptic plasticity rules can best approximate gradient descent. See poster and thesis.

• Poirazi Lab, FORTH IMBB-FORTH

Heraklion, GR

Philadelphia, USA

Neuroscience & AI Researcher (Intern, M.Sc. Fellow)

July 2022 - April 2024

- Examined the computational properties of dendrites. See nobrianer.
- Continued the work I started at the Kording Lab. See poster and thesis.

## Industry Work Experience

 Remote

April 2021 - July 2022

- Platform features and issues: Developed features and addressed issues having to do with machines, stacks, networks, scripts and other resources managed by the platform within the *api* and *tests* submodules of both community and enterprise editions. See my contributions on mist-ce.
- Third-party company tests: Outlined and implemented the API and functional tests of a distributed micro-services client project for JUNIPEL
- 🏕 graet Greek Research & Technology Network

Remote

Software Engineer & Maintainer

May 2020 - April 2021

Contributed to reducing Greece's public sector bureaucracy: built, alongside one lead developer, and maintained the v1 of mitos: the Greek National Registry of Public Services (Εθνικό Μητρώο Διαδικασιών). See diavlos.

MYRMEX Myrmex (acquired by © Ocado)

Athens, GR

Sept. 2019 - March 2020

- Software Engineer
  - Power-monitoring application: Created a GUI that displays in real time the battery state of each robot.
  - gRPC clients: Ported gRPC client proxies for the APIs of two key system components.
  - **Bug-reporting tool**: Implemented a bug-reporting tool that automatically gathers diagnostics whenever a bug or issue arises, decreasing the time required to collect data from more than 20 min. down to 15 sec.

#### Engineering Internship Experience

## • (8) Larkum Lab, Humboldt University of Berlin

Remote

Software & Hardware Engineer

Jan. 2021 - Aug. 2021

Implemented a prototype of an experimental neuroscience protocol for the Larkum and Kremkow labs. This work was based on my previous work. See 🜓 airtrack.

## • Technical University of Crete

Chania, GR

Network Administrator

Nov. 2018 - June 2019

- Learned to do system and network administration tasks (secured network printers, etc.)
- Read the Will UNIX and Linux System Administration Handbook.

# • Oracle

Athens, GR

 $Database\ Administrator$ 

Oct. 2018 - Nov. 2018

- o Familiarized myself with Oracle DB 12c internals by doing day-to-day DBA tasks.
- Brushed up my SQL skills.

# • Google Summer of Code, GFOSS Open Technologies Alliance

Athens, GR

 $Software\ Engineer$ 

Summer 2018

Implemented a tool that extracts Responsibilities assigned to Public Administration Organizations from Greece's Official Government Gazette documents. See ggx.

# • Open Lab Athens

Athens, GR

Software Engineer

July 2017 - Sept. 2017

- Debugged the beta version of the Iris SMS Android app.
- Made a GUI for getting stats and syncing form data from a smart pen ( Neo N2).

## VOLUNTEER EXPERIENCE

• Poirazi Lab Remote

Software Engineer

July 2020 - May 2021

Volunteered on PyBpod, a programming interface for the Bpod: a system for precise measurement of small animal behavior.

- Implemented emulator functionality for the Bpod device. See my contributions to the pybpod submodules.
- Created v1 of the 2AFC experimental neuroscience protocol. See mouse2afc.

#### Supervisor Experience

• Henry J. Flynn @ Poirazi Lab, April – Aug. 2023: Drexel University student who under my supervision built upon my volunteer contribution and improved the Mouse2AFC protocol.

### AWARDS, FELLOWSHIPS & FUNDING

- 2023 2024
  - o BRAIN Neuro AI Early-Career Scholar, NIH/DARPA honorarium (Nov. 12 13, 2024): \$400
  - CSHL NeuroAI Program funding (June Nov. 2024, Banerjee Lab): \$40000
  - o Erasmus+/IKY funding (June Aug. 2024, CSHL travel & stay): 3600€
  - o IMBB-FoRTH MSc fellowships (July 2023 April 2024, Poirazi Lab): 5000€
- 2022 2023
  - UPenn Visiting Scholar funding (Dec. 2022 March 2023, Kording Lab): \$6000
  - o Erasmus+/IKY funding (Dec. 2022 March 2023, UPenn travel & stay): 4500€

# Conferences, Workshops & Summer Schools





BRAIN NeuroAI Workshop 2024 @ NIH Bethesda, Maryland, USA (poster)



NAISys2024: From Neuroscience to Artificial Intelligence 2024 @ CSH States States, New York, USA



• MLSS2024: Machine Learning Summer School 2024 @ OIST, Okinawa, Japan (poster)

## **Publications**

- 1. Christos Karageorgiou Kaneen, "Meta-learning synaptic plasticity rules to approximate gradient descent", M.Sc. Thesis, School of Medicine, University of Crete, Heraklion, Greece, 2024 (https://elocus.lib.uoc.gr/dlib/0/c/8/metadata-dlib-1713262345-844945-28206.tkl)
- 2. Christos Karageorgiou Kaneen, "Methodology for designing GDPR compliant IoT applications", M.Eng. Thesis, School of Electrical and Computer Engineering, Technical University of Crete, Chania, Greece, 2019 (https://doi.org/10.26233/heallink.tuc.84151)
- 3. Christos Karageorgiou Kaneen, E.G.M. Petrakis, "Towards evaluating GDPR compliance in IoT applications", Procedia Computer Science, Volume 176, 2020, Pages 2989-2998 (https://doi.org/10.1016/j.procs.2020.09.204)