

# Constantinos Eleftheriou

**Constantinos.Eleftheriou@ed.ac.uk**

Centre for Discovery Brain Sciences  
University of Edinburgh  
Scotland, UK  
+44 75 99497413

## PROFILE

I am interested in the neurocomputational mechanisms that underlie decision-making in health, and how these break down Autism Spectrum Disorders to yield their characteristic sensorimotor defects.

## EDUCATION

*Doctor of Philosophy, Neuroscience* September 2018 – Present  
The University of Edinburgh, Edinburgh, Scotland  
Thesis - Visuomotor Processing Defects in Autism Spectrum Disorders: A Decision-Making Perspective.  
Supervised by Prof. Ian Duguid, Dr. Stuart Cobb, Dr. Nathalie Rochefort & Prof. Peter Kind.  
Funded by the Simon's Initiative for the Developing Brain & the Principal's Career Development Scholarship.

*Bachelor of Science (Hons), Neuroscience* September 2015 – May 2018  
The University of Edinburgh, Edinburgh, Scotland First Class Honours (1:1)  
Dissertation - A Model-Driven Approach to Understanding Language Processing (1:1).  
Supervised by Dr. Cyril Pernet.  
Focused on Neural Circuits, Neuroimaging, Cognitive Modelling, Statistics.  
Direct entry to 2nd year.

## RESEARCH EXPERIENCE

*Center for Discovery Brain Sciences, The University of Edinburgh, Scotland*  
Research Assistant, Duguid Lab May – August 2018

- Developed software for a novel touchscreen-based reaching task in rodents.
- Designed and implemented a complete data management pipeline, including the procurement and setup of a new enterprise-grade storage and compute cluster.
- Contributed data analysis and automation expertise to existing projects in the lab.

*Centre for Clinical Brain Sciences, The University of Edinburgh, Scotland*  
Research Intern, Language and Categorization Lab May 2017 – June 2018

- Worked together with Dr. Cyril Pernet on a project aimed at uncovering the neural mechanisms of decision making during language processing, and how these are impaired in stroke patients with receptive aphasia.
- Analysed behavioural and fMRI data on patients performing a language pair matching task.
- Model-based approach using hierarchical drift diffusion decision models.
- Analysis of pilot fMRI data on healthy patients formed basis of my undergraduate dissertation.

*Cyprus Institute for Neurology & Genetics, Nicosia, Cyprus*  
Student Intern, Neurology Clinic E Dec 2014 – May 2015

- Worked as an intern at the Neuroscience laboratory (Neurology Clinic E) under Dr. Kleopa.
- Shadowed studies on demyelinating leukodystrophy and X-linked Charcot-Marie-Tooth Disease.

- Assisted wet-lab procedures including gel electrophoresis, PCR, Western blotting, operation of the cryostat, fluorescent microscopy, immunohistochemistry, as well as various experiments using transgenic mice as disease models.

Student Placement, Neurology Clinic E

Summer 2012 & Summer 2013

- Accepted for 4-week placements at Neurology Clinic E under Dr. Kleopa.
- Shadowed studies on demyelinating leukodystrophy and X-linked Charcot-Marie-Tooth Disease.
- Hand-on experience with gel electrophoresis, Western blotting and PCR.

## COMPUTING EXPERIENCE

*IT Infrastructure, Information Services, The University of Edinburgh, Scotland*

Unix Systems Administrator, Enterprise Unix Platforms

March 2016 – June 2018

- Worked in a team responsible for the operation, development, maintenance and facility management of services and systems which use the Unix/Linux operating systems, together with the central provision of compute and data storage services for both the University functions and its research base.
- Focused on infrastructure automation and service delivery on a VMware-based virtual estate.
- Architected & developed a user request & billing platform for our virtual hosting service, as well as a self-service portal & administrative toolkit for our OpenStack estate.
- Worked extensively with technologies such as Puppet, OpenStack and Terraform to push the University's digital capabilities forward, in addition to a variety of traditional scripting languages including Bash, Python and Perl.
- Provided second-line support to many of the University's schools & departments.
- This work was done on a part time basis alongside my studies, with full-time employment during the summer break.

*Paphos General Hospital, Paphos, Cyprus*

Developer

Oct 2013 – May 2014

- Worked with the Respiratory Department of the Paphos General Hospital to develop a patient management application to replace their paper-based appointment system.
- GUI software based on C# and .NET

## TEACHING EXPERIENCE

*Biomedical Teaching Organisation, Medical School, The University of Edinburgh, Scotland*

Data Analysis & Statistics Support, Biomedical Honours Programme

April 2019 – Present

- Worked with Dr. Crispin Jordan to support final-year undergraduate students with data analysis for their dissertation.

Neuroscience Honours Tutor

October 2018 – Present

- Facilitated journal club / paper discussion meetings with final-year undergraduate students.
- Prepared students for a final year paper discussion exam.

*Digital Skills & Training, Information Services, The University of Edinburgh, Scotland*

Unix Shell Programming

Sept 2017 – June 2018

- Participated in the delivery of Unix 1, 2 & 3 courses as a demonstrator.
- Practical introduction to advanced shell scripting in the Unix environment, directed at university staff and postgraduate students.

## PROGRAMMING SKILLS

Experienced in Python, C, C#, Bash, Linux/Unix, MATLAB, R, Scheme, Common Lisp, VMWare, Puppet, Terraform, OpenStack, LaTeX, MySQL/MariaDB, SQLite3, Postgres

## MEMBERSHIPS

Senatus Academicus, University of Edinburgh; *Elected Member*  
CDBS Executive Committee, University of Edinburgh; *Postgraduate Lead*  
British Neuroscience Association; *Member*  
The Physiological Society; *Member*  
Cyprus FOSS Society; *Founding Member*

## AWARDS & SCHOLARSHIPS

Principals Career Development Scholarship, The University of Edinburgh (2018-2022)  
PhD Studentship, Simons Initiative for the Developing Brain (2018-2022)  
SEOTY Award for Commercial Impact, Careers Service, The University of Edinburgh (2018)  
The Edinburgh Award (Work Experience), The University of Edinburgh (2017)  
Bank of Cyprus Student Excellence Award (2014)  
Outstanding Learner Award for Top Mark in Cyprus in AS Computing, Cambridge International Examinations (2014)  
The International Award for Young People (2013)  
Fulbright Bicommunal Leadership Programme, Fulbright Commission, USA (2011)

## REFERENCES

**Prof. Ian Duguid**  
Centre for Discovery Brain  
Sciences  
The University of Edinburgh  
Hugh Robson Building  
16 George Square  
Edinburgh, EH8 9XD  
ian.duguid@ed.ac.uk

**Dr. Cyril Pernet**  
Centre for Clinical Brain  
Sciences  
The University of Edinburgh  
Chancellors Building  
49 Little France Crescent  
Edinburgh, EH16 4SB  
cyril.pernet@ed.ac.uk

**Martin Campbell**  
ITI Enterprise Unix  
Information Services  
The University of Edinburgh  
Argyle House  
3 Lady Lawson Street  
Edinburgh, EH3 9DR  
martin.campbell@ed.ac.uk