

Laura R. Edmondson

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EDUCATION

Ph.D. Psychology (*Computational Neuroscience*)

Supervisors: Dr Hannes P. Saal & Dr Stuart Wilson

Thesis: 'Modelling the Emergence and Plasticity of Somatosensory Cortical Maps of the Hand'

Leadership: Psychology Postgraduate Society President, Lead Python Instructor with CodeFirstGirls

University of Sheffield, UK

2017-Present

MSc Cognitive and Computational Neuroscience

Classification: Distinction

Supervisor: Dr Hannes P. Saal

Thesis: 'Computational Modelling of the Emergence of Somatosensory Cortical Maps'

Leadership: Academic student-staff course representative

University of Sheffield, UK

2016-2017

BSc(Hons) Psychology

University of Manchester, UK

2011-2014

CONFERENCE PROCEEDINGS

Edmondson, L. R., Jiménez-Rodríguez, A., & Saal, H. P. (2019) Nonlinear scaling of resource allocation in sensory bottlenecks. In *Advances in Neural Information Processing Systems*.

PREPRINT

Wesselink, D. B., Sanders, Z. B., **Edmondson, L. R.**, Dempsey-Jones, H., Kieliba, P., Kikkert, S., Themistocleous, A.C., Emir, U., Diedrichsen, J., Saal, H.P. and Makin, T.R. (2020). Malleability of the cortical hand map following a finger nerve block. *bioRxiv*.

ORAL PRESENTATIONS

COSYNE

'Expansion and contraction of resource allocation in sensory bottlenecks'

Online conference, February 2021

Psychology Postgraduate Conference

Presentation for the Department of Psychology

University of Sheffield, 2020

Neuromatch

Presented work from NeurIPS 2019

Online conference, March 2020

Researchers in Touch

Invited talk in symposium on plasticity

University of Nottingham, 2019

Hand, Brain & Technology

Selected talk from abstracts

Monte Verita, Switzerland, 2018

Psychology Postgraduate Conference

Presentation for the Department of Psychology

University of Sheffield, 2018

Plasticity Lab

Presentation of current research to collaborators

University College London, 2018

POSTER PRESENTATIONS

Neural Information Processing Systems (NeurIPS)	Vancouver, Canada, 2019
UK Neural Computation	University of Nottingham, 2019
Sheffield Robotics Showcase	University of Sheffield, 2019
Skin To Self meeting	University College London, 2019
Sheffield Graduate Showcase	University of Sheffield, 2019
Society for Neuroscience	San Diego, US, 2018
Integrated Systems Neuroscience Workshop	University of Manchester, 2017
Sheffield Neuroscience Conference	University of Sheffield, 2017

AWARDS/ GRANTS

NeurIPS Travel Award <i>\$1500 travel award to present poster at the conference.</i>	2019
Grindley Travel Grant, Experimental Psychology Society <i>Travel grant to present at 'Researchers in Touch' conference.</i>	2019
Sheffield Postgraduate Showcase Poster Award	2019
David Marr Prize, The University of Sheffield <i>Awarded for highest academic achievement on MSc programme.</i>	2017
PhD Teaching Fellowship, The University of Sheffield <i>£70k award covering tuition fees and maintenance for 4 years.</i>	2017
Sheffield Neuroscience Conference Poster Award	2017
The University of Manchester Leadership Programme Gold Award	2012

TEACHING AND SUPERVISION

Teaching Assistant, University of Sheffield

Psychological Research Methodology <i>Research methodology and SPSS statistics courses for undergraduate students. Duties included leading and assisting in computer classes, marking coursework and exam scripts (5 semesters totalling over 400 hours).</i>	2018-2020
Mathematical Modelling and Research Skills <i>Guest lecturer for Masters level module. Developed and led sessions on Matlab fundamentals revision and debugging.</i>	2019
Neuroscience And Evolutionary Psychology, Essential Social Psychology <i>Led exam revision classes for first year undergraduate students.</i>	2018

Research Student Co-supervisor	
<i>Luke Cleland (BSc Psychology, MSc Cognitive & Computational Neuroscience)</i>	2018-2020
<i>Ursula de Souza (MSc Cognitive & Computational Neuroscience)</i>	2018

Volunteer Python Teacher, CodeFirstGirls

CodeFirstGirls is a non-profit enterprise providing free training in tech for women and non-binary students.

Introduction to Python Programming (Course Lead Instructor)	2020
<i>Prepared additional materials and project options for students using Kaggle & open source datasets, including introductory data analysis. Organised sessions & led a team of four instructors. Arranged transition to online learning for second part of the course due to COVID19.</i>	

Advanced Python for web development	2019
<i>Led sessions on python fundamentals, Git and data analysis during summer & autumn semester.</i>	

PEER REVIEW

EuroHaptics Conference, IEEE Haptics Symposium, IEEE World Haptics Conference

OUTREACH & VOLUNTEERING

Computational Neuroscience Pathways	2020
<i>Panel discussion on pathways into computational neuroscience for MSc students</i>	

Women in Machine Learning Workshop (WIML), NeurIPS	2019
<i>Assisted in setup of poster session for NeurIPS affinity workshops</i>	

Sheffield Psychology Postgraduate Conference	2019
<i>Presentation chair: Neuroscience</i>	

Sheffield Discovery Night	2019
<i>Interactive stand on the rubber hand illusion.</i>	

Neuroscience at Sheffield Video	2019
<i>Presenter on the 'Neuroscience at Sheffield' video</i>	

TRAINING & SUMMER SCHOOLS

NeuTouch Summer School on Touch for Neuroprosthetics	2020
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Neuromatch Academy Computational Neuroscience Summer School (Interactive track)	2020
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Research Ethics and Integrity	University of Sheffield, 2018-2019
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Introduction to High Performance computing	University of Sheffield, 2017
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Essential Mathematics (module)	The Open University, 2015-2016
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Introduction to Software Development in Java Certificate	University of Manchester, 2015
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Personal Development and Effectiveness Course	PriceWaterhouseCoopers, 2013
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EMPLOYMENT

International Office Assistant <i>International Student Recruitment and Admissions</i>	University of Manchester 2015-2016
Student Recruitment and External Affairs Assistant <i>School of Computer Science</i>	University of Manchester 2014-2015
Student Co-ordinator & Mentor	University of Manchester, 2012-2014

SKILLS

Python (*scipy, numpy, scikit-learn, matplotlib*), Matlab, Git, HPC, SPSS, LaTeX, Adobe suite (*Photoshop, Lightroom & Illustrator*), Microsoft Office