

HUNTER SCHONE

A PhD student of neuroscience with 7+ years of experience working on research on **motor learning**, **brain plasticity**, and **prosthetic robotic limbs**

EDUCATION

University College London

PhD Neuroscience, Aug 2018 - Aug 2023

MSc Clinical Neuroscience, Aug 2016 - Aug 2017

Westminster College, Utah

BSc Neuroscience, Aug 2013 - May 2016

Online Courses

Neuromatch Academy - Deep Learning (2022)

Machine learning in python with scikitlearn (2021)

Machine learning engineering for production specialization (2022)

SKILLS

Project Management

Experimental Design

Python (Jupyter, Pytorch, scikitlearn, matplotlib, pandas)

Matlab

Signal Processing

Multimodal neural/physiological recording systems

Behavioral analytics

Neuroimaging

Statistics (Frequentist & Bayesian)

Adobe Photoshop, Illustrator

AWARDS

UCL Department Scholarship

Top Upgrading PhD Student in UCL Department, 2020

NIH Graduate Student Research Award

Top Neuroscience Student of The Year, 2020

Top Oral Presentation Award

UCL-NIMH Joint Research Symposium, 2019

INTERESTS

Hiking, camping, weightlifting

EXPERIENCE

National Institutes of Health, Maryland

Neuroscience PhD candidate, Aug 2018 - Aug 2023

- Led all aspects on multiple 5-year long research projects on brain plasticity and control strategies for robotic prosthetic hands.
- Supervised an 8 person team to execute this research.
- Tested 300+ participants using fMRI, electromyography (EMG) and multiple behavioral measures to quantify hand motor control.
- Designed and analyzed data from 5+ quantitative research studies including a variety of datatypes: neuroimaging, complex behavior, real-time EMG.
- Designed and fabricated a muscle-controlled supernumerary robotic arm that I then trained 60 users to learn to operate

University of Oxford, Oxford, UK

Research assistant, Aug 2017 - Aug 2018

- Devised, conducted, analyzed and published fMRI research on how the brain represents tools in expert tool users and proposed novel theories on how the brain supports expert motor skill.

University College London, London, UK

Clinical research assistant, Aug 2016 - Aug 2017

- Setup a cross-centre clinical collaboration between 7 NHS clinical sites across the UK.
- Recruited and tested 60+ limbless prosthetic limb users.
- Helped develop a robotic arm tracking system to study prosthetic hand motor control.

COMMUNICATION

On my research

- Published 7 empirical research papers (5-first author)
- Presented at 15+ scientific conferences

Within my community

- Organized, chaired and presented at a symposium at the world's largest neuroscience conference (SfN, 2022)
- Organized and moderated an industry-academia seminar series for trainees interested in brain computer interfaces, which included speakers from Meta, BlackRock Neurotech, Paradromics.