

SOPHIA BATCHELOR

Who Am I

Neuroscience PhD Researcher interested in developing better interactions between people and technology. My PhD concerns human, and machine skill learning.

I actively contribute to data privacy and research ethics projects, and am currently learning modelling techniques for causal inference in order to further my work with Born in Bradford.

Work Experience

Research Engineer

Inner Cosmos | Contract, Remote | December 2019 - May 2020

- Developed an online analysis Augmented Reality application.
- Built the physician and user facing architecture for the Inner Cosmos device.
- Managed various product lines through company launch.

Neuroscience Researcher

UC Berkeley's Center for Augmented Cognition | Berkeley, CA | Dec 2018 - Dec 2019

- Developing Bayesian models for human learning and memory.
- Researching the role of the cerebellum on motor control using Virtual Reality.
- Studying the effect of visual acuity on memory acquisition in Virtual Reality.

Neuroscientist in Residence

Neurocity | Brooklyn, NY | May 2019 - Aug 2019

- Scoped and developed a validation system for neurophysiological hardware.
- Built the end-to-end software platform for signal processing, and analysis of brain data which translates the raw electrical signal into API ready data.
- Scoped and developed 2 APIs for direct brain-to-device interfacing.
- Shipped DK1 ahead of time and on budget.

Research Assistant

- Richard Ivry Lab at University of California Berkeley (**Psychology**)
- Allan Yang (FHL Center) at University of California Berkeley (**Computer Science**)
- Biological Psychology at University of Canterbury (**Histology**)
- Neurodegenerative Disease Laboratory at University of Florida (**Neuroscience**)
- Dacher Keltner Lab at UC Berkeley (**Psychology**)

Product Management Intern

CodeCombat | San Francisco, CA | June 2018 - April 2019

- Managed User Research to identify core user needs for product development.
- Designed appropriate solutions while managing time and costing constraints.
- Shipped 4 multi-tier features throughout internship.

Research and Development Intern

NewPathVR | San Francisco, CA | April 2018 - June 2018

- Designed and ran user research to develop a Virtual Reality application.
- Built a biofeedback integration between a Muse wearable and Unity.

Spinal Rehabilitation Specialist - Training

Contract | Christchurch, NZL | May 2016 - August 2017

- Developed and delivered an adolescent targeted rehabilitation protocol
- Recognized by the District Health Board for reformation programs within the spinal unit after 4 of my cases regained full functional mobility and sensation.

Contact



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www.brainonsilicon.com

@brainonsilicon

Education

University of Leeds Ph.D. Student Cognitive Neuroscience

The Neuroscience of Virtual Reality:
Perception and Cognition

University of California Berkeley

BSc Psychology & BA Interdisciplinary
Studies (Computer Science,
Neuroscience, and Ethics)

Passion Projects

The Alan Turing Institute

The Turing Way - Principles and
Practices for Ethical Research.

Open Life Science 2020 Fellow

Developing systems for the
maintenance and distribution of
ethical research (Data Privacy).

Open Life Science 2020 Fellow XRSI Advisor - Privacy and Ethics

Advise the development of Privacy
Framework for Spatial Computing.

Vice President VR @ Berkeley

Led the largest, student run AR/VR
organisation in North America.

Awards

Department award for Outstanding
Undergraduate Research | **Imagine
Cup World Finalists** | Seattle
Hackathon Winner 2018 | **2012
Olympic Qualifier** | 4x World
Championships Competitor | **NCAA
All American** | 152 Time National
Record Breaker | **First New
Zealand Woman under 60 Seconds**
in the 100m Butterfly |