Gabrielle Shvartsman

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OBJECTIVES

No matter our environment, our well-being and interpretation of that environment stems from the mind. I want to apply my neuroscience and computer science knowledge to developing technology and furthering research for neuro- and bio-feedback therapies to help those whose perception is altered by neuropsychiatric and neurodegenerative disorders.

EDUCATION

Spring 2020

University of California, Berkeley | Berkeley, CA
Major: Bachelor of Arts in Molecular and Cellular Biology, Neurobiology
Minor: Computer Science

RESEARCH & INDUSTRY

Fall 2019-Present

Neuroprosthetic Skill Learning | Carmena Lab, UC Berkeley
- Research assistant in data analysis, animal training, experiment set-up and clean-up, and data pipeline setup
- Current project uses brain machine interface (BMI) to investigate how corticostriatal communication evolves throughout abstract skill learning

Summer 2019

Data Science Intern | Chan-Zuckerberg Biohub
- Designed a pipeline for expedited gene sequencing data processing
- Created the suede (Single-Unit Electrode DEcoding) neuroanalytics library

Spring 2018

Software Team | Neurotechnology @ Berkeley
- Designed the StayWoke app that processes EEG signals from a Muse meditation headset to alert drivers who are falling asleep

Fall 2017-Spring 2018

Cognitive Neuroscience | D'Esposito Lab, UC Berkeley
- Assisted with fMRI "face-place" study execution and writing task scripts

Summer 2017

Biological Regulation | Shvartsman Lab, Princeton University
- *Drosophila* maintenance, crossing and screening, imaging of embryos via microscopy, embryo fixation, and protocol research and design

TEACHING & LEADERSHIP

Fall 2020-Present

Producer | NeuroCinema Podcast
- Founding member, producer, and host of podcast at the intersection of neuroscience and cinema

Fall 2018-Spring 2020

Art and Mind | UC Berkeley
- Founding member and executive External Affairs Officer of campus organization dedicated to raising mental health awareness and exploring art therapy

Fall 2016-Spring 2020

Cal Club Tennis Team | UC Berkeley
- Competed and traveled to Tennis on Campus tournaments throughout California and Arizona
- As 2019-2020 co-captain, handled travel, finances, and university communications

Summer 2019

Git-Excited | CZ Biohub - Led company-wide workshop on Git basics

Spring 2019

Campus Ambassador | UC Berkeley - Represented the university as a tour guide and Visitor and Parent Services member

Spring 2018

Intro to Computer Science Lab Assistant | UC Berkeley

PUBLICATIONS

Shvartsman, G.F., Zippi, E.L., & Carmena, J.M., "Quantifying Within-Day Abstract Skill Learning and Exploring its Neural Correlates." Berkeley Scientific Journal (2020)

LANGUAGES & SKILLS

Spoken: English (native), Russian (native), Spanish (adv.)
Programming: Python (primary), AWS, Matlab, Java, Rust, C

RELEVANT COURSEWORK

Neurobiology and Cognitive Science

Biochemistry | Genetics & Genomics | Circuits & Systems Neuroscience | Neurobiology Laboratory | Philosophy of Mind | Mind, Matter, & Consciousness

Computer Science

Algorithms | Machine Learning | Artificial Intelligence | Data Structures