SHAMAY AGARON

CONTACT INFORMATION:

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+ EDUCATION

May 2019 **Princeton University**

Anticipating A.B. in Computational Neuroscience
with a certificate in Statistics and Machine Learning

Select Coursework:
- fMRI Decoding Methods (Python)
- Fundamentals of Machine Learning (Python)
- Quantitative Methods in Data Science (R)
- Mathematical Tools for Neuroscience (MATLAB)
- Organic Chemistry & Biochemistry
- Cellular and Molecular Biology

June 2015 **Stuyvesant High School**

+ PROFESSIONAL EXPERIENCE

Summer 2018 HEALTH DESIGN LAB at THOMAS JEFFERSON MED
Health Design Researcher, Team Lead

Reconstructed high fidelity 3D-printed structures from patients' scans (CT/MRI) to assist surgeons in practicing and planning procedures. Developed novel processing workflow to overcome limitation relating to bone fracture recognition.

Summer 2016 KELLER CENTER at PRINCETON UNIVERSITY
Design Thinking Consultant, Team Facilitator

Applied principles of Design Thinking to empower student developers and further develop Princeton's culture of innovation. Conducted stakeholder interviews, employed ethnographic research methods, and led client presentations.

Summer 2015 ENTREPRENEURS ROUNDTABLE ACCELERATOR
Marketing and Sales Intern

Assisted startup Dezignable with aggregating an extensive blogger database, creating and maintaining their online store, enabling and managing affiliate network accounts, and managing their Google AdWords campaign.

Summer 2014 MORGAN STANLEY
Data Analyst

Investigated the performance of third party vendors with ServiceNow. Identified areas of improvement, generated weekly reports, and led team meetings.

+ RESEARCH & PROJECT WORK

Cognitive Wearable Sensors, advised by Niraj Jha
August 2018 - Present, at Princeton University

Investigating the relationship between respiratory rate and neural network models of cognitive control (focus).

Collaborating with startup Spire to develop algorithms that help users shape their patterns of focus states.

Cognitive Control Lab, advised by Jon Cohen
October 2017 - Present, at Princeton University

Developed recurrent neural network model to simulate constraint of control in a task-switching environment.

Designed a web-based psychophysical experiment to compare model predictions against behavioural data.

Finding Trans-diagnostic Psychiatric Symptoms
February - May 2018, at Princeton University

Employed unsupervised clustering approaches to find trans-diagnostic markers of mental disorders. The results qualify and extend the conclusions of Gillan et al. (2016).

Cell Fitness Lab, advised by Eduardo Moreno
Summer 2017, in Lisbon, Portugal

Characterized gene expression linked to cell competition in a Parkinson's model in *Drosophila*. Techniques include fly pushing, brain dissections, and confocal microscopy.

+ VOLUNTEER ENGAGEMENTS

KINDRED HOSPICE
September 2016 - May 2018

Provided weekly social and emotional support to hospice patients. Trained in providing palliative care and the complexity of death for patients and families.

SPEAR (Students for Prison Edu. and Reform)
May 2016 - April 2018

Collaborated with lawyers, fund managers, and community reps. to establish Philadelphia Bail Fund to post bail for impoverished community members.