

# CURRICULUM VITAE

## PERSONAL INFORMATION

Name: Eli Pollock

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## WORK

### **DATA MANAGEMENT FOR OPEN SCIENCE (AKA ONTOLOGIC)**

Cambridge, MA

#### ***Co-founder and Chief Product Officer***

June 2022 – Present

- Co-founded a startup to help scientists manage and analyze their data
- Participated in the MIT Delta V accelerator Summer 2023 cohort
- Worked with engineering and sales teams to develop product

## EDUCATION

### **MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)**

Cambridge, MA

#### ***PhD in Brain and Cognitive Sciences***

September 2016 – May 2022

### **UNIVERSITY OF PENNSYLVANIA**

Philadelphia, PA

#### ***College of Arts and Sciences***

September 2012 – May 2016

- Graduated magna cum laude from the Vagelos Scholars Program in the Molecular Life Sciences
- BA, Majors in Biophysics and Physics, Minor in Engineering Entrepreneurship

## RESEARCH EXPERIENCE

### **JAZAYERI LAB, MIT**

Cambridge, MA

#### ***Graduate Researcher***

April 2017 – May 2022

- Uses machine learning tools to study the computational role of neural dynamics
- Created a Python module for working with recurrent neural networks (RNNs)
- Designed and ran human psychophysical experiments to test model hypotheses

## TEACHING EXPERIENCE

### **MIT COURSE 9.014**

Cambridge, MA

#### ***Teaching Assistant***

Fall 2017, Fall 2018, Fall 2019

- Full course title: Quantitative and Computational Methods in Neuroscience

### **MIT EDUCATIONAL STUDIES PROGRAM (ESP)**

Cambridge, MA

#### ***Teacher***

Fall 2016, Summer 2017, Summer 2018

- Created lesson plans and taught middle and high school students in ESP's Splash and HSSP programs

### **UNIVERSITY OF PENNSYLVANIA WRITING CENTER**

Philadelphia, PA

### **Writing Tutor**

January 2013 – May 2016

- Provided peers with help to communicate more effectively in their writing

### **LEADERSHIP AND ACTIVITIES**

#### **MIT SCIENCE POLICY INITIATIVE**

Cambridge, MA

##### **President**

June 2017 – June 2018

- Raised over \$35,000 from various MIT departments
- Provided opportunities for dozens of graduate students each semester to engage with science policy on local and national levels
- Ensured smooth operation of extensive programming including peer discussions, faculty lunches, and trips to Washington, D.C.

#### **THE POLYBIAN SOCIETY**

Philadelphia, PA

##### **President and Co-Founder**

September 2013 – December 2015

- Provided an inclusive forum for increasing intellectual discourse about societal issues on campus
- Founded and led a club with over 150 members initiated

### **AWARDS AND HONORS**

- National Science Foundation (NSF) Graduate Research Fellowship Program Honorable Mention (April 2018)
- 1<sup>st</sup> Place Team, IEEE Boston Brain Data Bank Competition (December 2017)
- Inducted member of Nu Rho Psi Neuroscience Honor Society (September 2015)
- University of Pennsylvania Dean's List (2012-2013, 2014-2015, 2015-2016)

### **PUBLICATIONS (\* DENOTES EQUAL CONTRIBUTION)**

- **Pollock E**, & Jazayeri M. 2020. "Engineering recurrent neural networks from task-relevant manifolds and dynamics." *PLoS Computational Biology*, 16(8), e1008128.
- Gauthier J\*, Loula J\*, **Pollock E\***, Wilson T B\*, & Wong C\*. 2019. "From mental representations to neural codes: A multilevel approach." *The Behavioral and Brain Sciences*, 42, e228.
- Tang E, Giusti C, Baum G, Gu S, **Pollock E**, Kahn A, Roalf D, Moore T, Ruparel K, Gur R, Gur R, Satterthwaite T, & Bassett D. 2017. "Developmental increases in white matter network controllability support a growing diversity of brain dynamics." *Nature Communications*, 8 (1252).

### **PRESENTATIONS AND CONFERENCE ABSTRACTS**

- **Pollock E**, and Jazayeri M. 2019. "Rapid embedding of low-dimensional dynamics in a recurrent neural network." Poster presented at the Computational

and Systems Neuroscience (COSYNE) meeting; Feb 28 – Mar 3, 2019; Lisbon, Portugal.

- **Pollock E**, and Jazayeri M. 2018. "A recurrent neural network model of a timing and working memory task." Poster presented at the MIT Intelligence Quest Launch; March 1, 2018; Cambridge, MA.
- Hosseini E, and **Pollock E**. 2017. "Eye movement-based probabilistic models for physical scene understanding." Poster presented at the 39<sup>th</sup> Annual Meeting of the Cognitive Science Society; July 26-29, 2017; London, UK.
- **Pollock E**, Desai N, Wei X-X, and Balasubramanain V. 2017. "A mechanism for self-organized error-correction of grid cells by border cells." Poster presented at the Computational and Systems Neuroscience (COSYNE) meeting; Feb 23-26, 2017; Salt Lake City, UT.