

# Andrew Heusser

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## EDUCATION

### NEW YORK UNIVERSITY

#### PHD IN COGNITIVE NEUROSCIENCE

Grad. July 2016 | New York, NY

My research utilized neuroimaging and computational models to understand human learning and memory

### NORTHEASTERN UNIVERSITY

#### BS IN PSYCHOLOGY

Grad. May 2008 | Boston, MA

## LINKS

Github:// [andrewheusser](#)

LinkedIn:// [andrew-heusser](#)

Twitter:// [@andyheusser](#)

Facebook:// [andrew.heusser](#)

## COURSEWORK

### GRADUATE

Computational Modeling of Cognition

Math Tools for Neuroscientists

Learning & Memory

Perception

Cognitive Neuroscience

Neuroanatomy

### ONLINE

Coursera Deep Learning Specialization

Machine Learning

Javascript: Understanding the Weird Parts

Learn and Understand AngularJS

Learn and Understand NodeJS

Angular 2 with Typescript

## PROGRAMMING

Proficient:

Python • JavaScript • Matlab

Shell •  $\text{\LaTeX}$  • HTML • CSS

Familiar:

Arduino • Processing • MySQL

## SOFTWARE

Lead developer:

HyperTools • Quail • SuperEEG

Contributor:

Pliers • JsPsych

## EXPERIENCE

### DARTMOUTH COLLEGE | POSTDOCTORAL FELLOW

July 2016 – present | Hanover, NH

- Integrating computational models, machine learning, and data (neural and behavioral) to optimize human learning efficiency.
- Leading development of open-source software for data analysis and data visualization.

### OPENBCI | RESEARCH SCIENTIST / SOFTWARE ENGINEER

Aug 2015 – June 2016 | Brooklyn, NY

- Advised on the development of hardware/software for neuroscientific research applications.
- Lead the development of an open-source software platform for stimulus presentation and data collection in a web browser designed for behavioral and EEG research.

### UCDAVIS | JUNIOR SPECIALIST

Aug 2008 – Aug 2011 | Davis, CA

- Designed and conducted EEG study examining neural correlates of memory for temporal context.
- Used fMRI to investigate the brain areas involved in the maintenance of abstract rules.
- Administration and maintenance of a local linux-based network.

### FREELANCE | WEB / OPEN-SOURCE SOFTWARE DEVELOPER

2007 – present | Newburyport, MA

- I design websites for people and small businesses.
- I create open-source software for data analysis and data visualization.
- I program full-stack JavaScript web applications for fun.

## SELECTED PUBLICATIONS

**Heusser AC**, Ziman K, Owen LW, Manning J (In press). HyperTools: A Python toolbox for visualizing and manipulating high-dimensional data. **Journal of Machine Learning Research**

**Heusser AC**, Ezzyat Y, Shiff L, Davachi L (In press). Perceptual boundaries cause mnemonic trade-offs between local boundary processing and across-trial associative binding **JEP:LMC**

**Heusser AC**, Poeppel D, Ezzyat Y, Davachi L (2016). Episodic sequence memory is supported by a theta/gamma phase code. **Nature Neuroscience**

**Heusser AC**, Awipi T, Davachi L (2013). Repetition-related modulation of the perirhinal cortex predicts conceptual priming. **Neuropsychologia**

Ziman K, **Heusser AC**, Fitzpatrick PC, Field C, Manning J (2017). Is automatic speech-to-text transcription ready for use in psychological experiments? **psyArXiv**

## AWARDS

2013 Bennet B. Murdock Student Research Award

2013 NSF Graduate Research Fellowship Honorable Mention

2012 NSF Graduate Research Fellowship Honorable Mention

2008 Joseph Armington Memorial Award in Physiological Psychology Research

2007 Northeastern Provost Undergraduate Research Award