

# Josef Affourtit

Cambridge, MA

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## Education

### Ohio State University

B.S. PHYSICS

Department of Physics

Columbus, OH

2015 - 2019

## Research & Training Courses

### Massachusetts Institute of Technology

PROFESSIONAL CERTIFICATE PROGRAM IN MACHINE LEARNING & ARTIFICIAL INTELLIGENCE

Departments: CSAIL, IDSS, & LIDS

Cambridge, MA

2019 - 2020

## Publications/Working Papers

Diachek, E.\*, Siegelman, M.\*, Blank, I.\*, **Affourtit, J.** & Fedorenko, E. (2020). The domain-general multiple demand (MD) network does not support core aspects of language comprehension: a large-scale fMRI investigation. *Journal of Neuroscience*.

**Affourtit, J.** & Fedorenko, E. A probabilistic functional atlas of the human language network based on 800+ individuals. (In prep)

Mollica, F., Shain, C., **Affourtit, J.**, Kean, HH., Siegelman, M., & Fedorenko, E. Another Look at the Constituent Structure of Sentences in the Human Brain. (In prep)

Chen, X.\*, **Affourtit, J.\*** & Fedorenko, E. Music is not processed by the language-processing mechanisms. (In prep)

Schoessow, F.S., Workman, G., Vega, M.E., Harlow, C., **Affourtit, J.**, & Zhan, M. Autonomous aerial remote sensing platforms for monitoring of snow and ice at high altitudes. (In prep)

**Affourtit, J.**, & Scott, N. Optimal Adversarial Pathway Estimation Using Remotely Sensed Spectral-Terrain Data: A Graphical Modeling Approach. (In prep)

## Research & Technical Experience

### Massachusetts Institute of Technology

RESEARCH ASSOCIATE

- Implementing ML techniques on MRI data using the McGovern Institute's cloud computing platform
- Creating data visualization pipeline using python and MATLAB for lab use
- Created and currently maintaining evlab.mit.edu

Cambridge, MA

May 2019 - Present

### Ohio State University

RESEARCH ASSISTANT

- Creating and testing new technology related to autonomous aerial vehicles in small startup environment

Columbus, OH

Sep 2018 - May 2019

### Riverside Research

MACHINE LEARNING RESEARCHER

- Researching, evaluating, and implementating various ML techniques on HSI data

Dayton, OH

May 2018 - Aug 2018

### Ohio Supercomputer Center

STUDENT INTERN

- Assisting researchers with super computing tasks

Columbus, OH

Sep 2017 - May 2018

### Medpace, Inc.

ENGINEERING INTERN

- Creating and optimizing database using SQL for recruitment purposes

Cincinnati, OH

Aug 2016 - Dec 2016

## Skills

**Programming languages** Python, MATLAB, #C, BASH, C++, Node.js, HTML, CSS