## Jake Vasilakes

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## Experience

2017

 $\label{eq:Feb-June} \mbox{Feb - June} \ \mid \ \mbox{\bf Special Ed Paraprofessional}$ 

Mounds View Schools - Mounds View, MN

- Tutored students one-on-one and in small groups on a variety of topics from math to reading to ethics.
- Assisted teachers in running the classroom, including teaching duties.

Feb - Nov | Research Assistant in Speech Processing (IARPA Babel project)
2016 University of Cambridge - Cambridge, UK

- Trained and evaluated state of the art machine learning systems for automatic speech recognition on multiple datasets each containing over 80 hours of audio data.
- Performed statistical analysis with R using regression, significance testing, and visualization to develop a method of accurately predicting final system performance on unseen data. Presented findings at an academic conference.
- Designed and implemented pipelines for building statistical language models using Python and shell.
- Supervised an undergraduate student's research project on optimizing a search graph, which resulted in a conference paper.
- Maintained the project's set of software tools in shell, Python, and C.

- Designed a machine learning system utilizing clustering and regression algorithms for matching students to universities and assisting students with the application process.
- Assisted in writing an ultimately successful grant for funding.

## Education

Aug 2015 | University of Edinburgh

M.S. Speech and Language Processing, Distinction

June 2013 | Loyola University of Chicago

B.A. Philosophy with Honors, Magna Cum Laude

Skills

**Data Science:** Natural language processing, machine learning, neural networks, statistical analysis.

Programming Languages: Python, R, C, shell (bash & tcsh), SQL, regex

Software and Libraries: NLTK, Weka, NumPy, SciPy, TensorFlow, Jupyter, Git, LaTeX

Operating Systems: Linux/Unix, OS X, Windows