# Alec Mori

## **Education**

University of Illinois | B.S., Computer Science

Aug 2012 - May 2016

• Minor in Mathematics, GPA: 3.61

Hononegah High School

Aug 2008 - May 2012

## **Work Experience**

University of Illinois | Engineering Learning Assistant

Aug 2015 - Present

- Designed over a dozen lesson plans for the introductory engineering orientation course
- Taught a class of over thirty students

University of Illinois | CARE Tutor

Aug 2013 - Present

- Tutor students in a variety of subjects between Mathematics, Computer Science, and Statistics
- Am sole teacher in an office hour for six introductory math courses

University of Illinois | Course Design

May 2015 - Aug 2015

- Created a new Data Structures course for non-CS majors using D3 and Python
- Worked with several popular API's like Wikipedia, Google, and Spotify in Python
- Designed demos, homework, and lecture content for the semester-long course

# **Research Experience**

University of Illinois | Malicious Flash Drives

Jan 2015 - May 2015

- Tested security at UIUC by dropping psuedo-malicious flash drives around campus
- Wrote an Android application to monitor progress as we dropped flash drives around campus
- Worked with Google App Engine in Python and Android in Java

University of Illinois | SmartTaxi System

May 2014 - Aug 2014

- Used 4TB of New York taxi data to simulate their behavior with a SmartTaxi system
- Implemented ArcFlags and Contraction Hierarchies as well as KD-Trees to improve runtime
- Improved algorithm developed by MIT to calculate velocities on city streets

#### **Relevant Coursework**

Artificial Intelligence

Algorithms I, II, Graduate Topics

Calculus

Computer Architecture

Data Science

Data Structures

Differential Equations

Discrete Structures and Mathematics

Hypergraphics

Linear Algebra

Machine Learning (Signal Processing)

Numerical Methods

Probability and Statistics I, II

#### Extra Curriculars

R P Volunteer Chair	2015
HackIllinois Volunteer Chair	2015
Women in Computer Science	2014 - 2015
ACM	2013 - 2015

## Languages

Proficient: Python, Java, LaTeX Knowledgeable: Java (Android), C, C++ Familiar: Javascript (D3), MATLAB, MIPs

### **Distinctions**

Google Games - 1st Place	2015
Campus Honors Program	2012 - 2015
Dean's List	2012 - 2014