

## EDUCATION

### UNIVERSITY OF ILLINOIS

B.S., Computer Science  
Anticipated May 2017  
Engineering James Scholar

Urbana-Champaign, IL  
Total GPA: 3.66  
Major GPA: 3.90

## WORK EXPERIENCE

### Edward Madigan Laboratory (Vodkin Lab) – Software Engineer

April 2014-Present

Designed Python and bash scripts to automate, analyze, and display data obtained from Bowtie2 runs on soybean DNA and RNA sequences

Migrated the soybean database from an older version to the latest, while running sanity checks to make sure the proposed corresponding model DNA sequences between versions were similar

### Chicago Chair and Stool Incorporated (eHemco) – Programmer

Summer 2013

Designed a shipment program pulling information from Amazon.com seller data which reduced data entry time from over 4 hours to under 10 minutes

### Test Coach Corporation – Product Tester

Sept. 2011-Feb. 2012

Operated flying probe circuit board testers

## PROJECTS

### SIGMusic Engineering Open House 2014

Working with a Leap Motion controller to create a Human Computer Interaction demonstration using Python, PureData, Arduinos, LED lamps. The programming aspect involved physics and dynamically generated tunes from pop culture.

### Markov Music

Built using Python and C++, converts single channel MIDI into raw data and parses that into a Markov matrix. With that matrix, using Python modules, algorithmic music is generated using the learning data that was parsed.

### Hackathon Projects

**YHack 2014- art:** A Chrome extension that integrates great artworks into the daily browsing routine

**MHacks IV- MHacks Music:** An interactive and collaborative public graffiti wall for music

**HackIllinois 2014- Bweets by J:** A music generator using web-scraped data from Twitter queries

**Facebook Hackathon 2013-** Built an OpenCV and Facebook powered face replacement program

## SKILLS

### Computer Skills:

Python, Java, Javascript, JQuery, Unix-based Systems, Angular.js, C, C++, HTML, Mathematica

### Language Skills:

English – fluent, Chinese(Mandarin) – proficient, French – intermediate

## VOLUNTEER EXPERIENCE

### CSI25 Introduction to Computer Science Course Assistant

January 2014-Present

Aid the teaching assistant with running lab activities and hold office hours for all students

### Make More Music – Music Assistant

January 2014-Present

Volunteer at the local middle school 5<sup>th</sup> graders with their orchestra rehearsals