Matthew Niemer

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github.com/mniemer

Education

Northwestern University, Evanston IL **Fall 2014 – Spring 2018 (expected graduation date)**
McCormick School of Engineering and Applied Science
BS Computer Science
Murphy Institute Scholar
GPA: 3.739/4.00

Computer Skills

Languages (in order of experience): C#, Python, Java, C++, C, Lisp, JavaScript, HTML, CSS, MATLAB
Operating Systems: Linux, MS Windows, Apple iOS

Work Experience

Amazon.com, Inc **Summer 2017**
Software Development Engineer Intern

- Working with Amazon Web Services on the Elastic Cloud Computing team

Northwestern University, EECS Department **Winter 2017 – Present**
Undergraduate Peer Mentor, EECS-211: Fundamentals of Computer Programming II

- Taught discussion section and held office hours for younger students enrolled in introduction to object oriented programming course (C++)
- Wrote weekly labs for discussion sections which reviewed the week's material and reinforced concepts
- Assisted Professor with grading homework assignments and exams

Hagerty Insurance Agency **Summer 2016**
IT Application Development Intern

- Refactored and consolidated existing code to aid the addition of new deployment environments
- Built mobile android application which consumes public Hagerty web API service. Allows classic car enthusiasts with a historic Vehicle Identification Number to access & share respective vehicle descriptions

Clubs and Activities

Northwestern Robotics Club **Spring 2016 – Present**
Lacrosse Goalie Lead Programmer

- Developing vision system which triangulates 3D position coordinates of high-speed lacrosse ball with two Charmed Labs Pixy cameras
- Integrating vision system output with goalie’s Roboteq motor controller, which facilitates lacrosse stick movement

Project/Design Experience

Unhinged: Game Development Studio, Northwestern University **Winter 2017**

- Worked in a team of 3 to develop a full puzzle game from scratch in Unity (C#)
- Positive play tester feedback has motivated continued work w/ plans to release to the public (PC & Mac)

Tetris **Summer 2016**

- Self-motivated project to create a working local version of personal favorite game Tetris
- Written in Python, utilizes pygame package for managing user input and drawing sprites

TonEd: Machine Perception of Music and Audio, Northwestern University **Winter 2017**

- Created a tool which analyzes student violin tone and reports on their tone quality and steps to improve
- Uses Nearest Neighbor classifier on extracted audio features from a collection of violin tone samples