

Matthew Niemer

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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: 3.76/4.00

Computer Skills

Languages (in order of experience): Java, C#, Python, C++, C, Lisp, JavaScript, Ruby
Operating Systems: Linux, MacOS, MS Windows

Work Experience

Amazon.com

Summer 2017

Software Development Engineer Intern, AWS EC2 Spot

- Designed, implemented, and tested new customer-facing feature for AWS EC2 Spot Fleet web service
- Responsible for ensuring that new code is scalable, secure, and easily maintained

Northwestern University, EECS Department

Winter 2017 – Present

Undergraduate Peer Mentor, EECS 111, 211, 212

- Teach discussion section and hold office hours for younger students enrolled in introductory courses
- Wrote weekly EECS 211 labs for discussion sections which reviewed the week's material and reinforced concepts in C++
- Assist professor and with grading homework 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 Project Manager

- 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