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/MS Computer Science
Murphy Institute Scholar
GPA: 3.714/4.00

Dubuque Senior High School, Dubuque, IA   **Spring 2014**
Graduated with highest honors
Eagle Scout, September 2013

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

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 moves lacrosse stick

Engineers for a Sustainable World   **Winter 2015 – Spring 2016**
Pura Playa Team Member
- Organized and facilitated successful campus-wide awareness and movement to encourage Northwestern University to eliminate bottled water sales on campus

Project/Design Experience

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

Exercising the Numbers: Machine Learning, Northwestern University   **Spring 2016**
- Collected data and employed various machine learning algorithms to predict Northwestern gym attendance at different dates & times based on season, weather, campus events

Kanye Zone: Computer Systems Software, Northwestern University   **Winter 2016**
- Designed and built simple game in x86 assembly language, complete with rotating sprites and music

Civil Shield: Design Thinking and Communication, Northwestern University   **Spring 2015**
Client: Nick Wengrenovich, PhD at Northwestern University
- Worked with team of 3 to design a proof of concept for a rail car in the oil transportation industry which provides increased protection from extreme cases of deformation and heat