# **Matthew Simiele**

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#### **Education**:

#### Binghamton University, State University of New York, Watson School of Engineering and Applied Science

Bachelor of Science in Electrical Engineering

Expected May 2020

Cumulative GPA: 3.65/4.00

Dean's List IEEE Eta Kappa Nu Honor Society Spring 2017 - Spring 2018

Fall 2018 - Present

**Institute of Electrical and Electronics Engineers** 

2016 - Present

External Vice President President

2017 - 2018

2018-Present

#### **Technical Skills:**

• C/C++

MATLAB

Microsoft PowerPoint

Soldering

Java

Microsoft Excel

Xilinx

KiCad

# **Courses to be Completed by Summer 2019:**

Engineering Applications I & II, Engineering Communication I & II, Digital Logic Design, EECE Seminar I, Computer Science for Engineers, Sophomore Design, Circuits, Linear Algebra and Computer Programming, Probabilistic Systems, Signals and Systems, Electronics, Semiconductors, EECE Seminar II, Electromagnetics, Controls I, Communication Systems, Junior Design

## **Team Project Experience:**

## IEEE Mars Rover Team, Binghamton, NY

August 2018 - Present

- Served as a member of the Administrative team due to my position as President of IEEE
- Designed and developed a motor control system using an Atmega 328

#### General Rover Project, Binghamton, NY

March 2018 - May 2018

- Utilized Xilinx to program an FPGA to drive a Dagu Rover 5 to a given point in a coordinate system
- Using an Atmega 328 and a light sensor, programmed the Dagu Rover 5 to dive on a line and solve a maze

#### Dynamic System Project, Binghamton, NY

March 2018 - May 2018

- Explored Dynamic Systems by applying Linear Algebra concepts and using MATLAB
- Modeled a Dynamic System with disturbances and used tools in MATLAB to measure the states

## Arduino: Rock Paper Scissors Game, Binghamton, NY

August 2016 - October 2016

- Created a game that allowed for user input from 3 buttons to simulate the user putting up Rock, Paper, or Scissors
- Simulated the opponent with a randomizer in the Arduino code which displayed on an 8 by 8 LED screen and displayed the outcome of the user and the computer's Rock Paper Scissors game
- Showcased the game at Binghamton University's Arduino Exposition

#### Reverse Engineering: Farberware Coffee Maker, Binghamton, NY

October 2016 - December 2016

- Dissembled a home coffee maker and took dimensions to create a CAD model using Solid Edge
- Modified the design of the coffee maker to increase the functionality of the product with a group of students

## FIRST Robotics, Lockport, NY

September 2012 – June 2016

- Served as the Scouting Team Leader for 2 years
- Managed a group of students from 16-30 to scout matches to give our team the best chance to compete in the playoff rounds
- Updated and changed the scouting app from year to year with the help of a mentor
- Participated as a member of the build team for 4 years, helping to build the robot and any parts for the robot

#### **Professional Experience:**

## Reid's Ice Cream - LLC, Lockport, NY

June 2016 – August 2018

Sales Person

Assisted other members of the company and provided customers with their desired orders and other needs

#### Niagara County Community College, Sanborn, NY

May 2018 - August 2018

Seasonal Groundskeeper

Executed daily operations of ground maintenance