

Matthew Martin

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OBJECTIVE

Undergraduate student seeking a summer 2021 internship with a specialization in software development

EDUCATION

University of Michigan

Bachelor of Science in Engineering, Computer Science

GPA: 3.92/4.00

Course work: EECS 280, EECS 203

Ann Arbor, MI

Expected April 2023

Detroit Catholic Central High School

High School Diploma

GPA: 3.99/4.00

Novi, MI

May 2019

PROJECT EXPERIENCE

Michigan Mars Rover Project Team

Computer Vision Sub-Team Member

Ann Arbor, MI

September 2019 – Present

- Collaborating to develop onboard computer vision software using OpenCV for obstacle detection and autonomous rover collision avoidance using stereo camera
- Aided in designing AR Tag detection and interpretation to enable rover to autonomously traverse course using AR Tags as checkpoints
- Upgraded and standardized sub-team Linux development environment to allow access to expanded OpenCV libraries, that were leveraged for AR Tag Detection

FIRST Robotics Team #5907

Drive Coach, Operator

Novi, MI

September 2017 – May 2019

- Operated the robot during competition to win the 2018 district championship
- Directed the actions of robot operators during competition to win the 2019 district championship
- Processed opposing teams' statistics based on scouting input in Tableau for developing winning match strategies

LEADERSHIP

Eagle Scout

Senior Patrol Leader, Philmont Crew Leader

Northville, MI

Fall 2015 – Present

- Planned and directed troop activities for campouts and weekly meetings
- Managed and led crew through a High Adventure 75-mile trek through the Rocky Mountains
- Organized and executed 3 robotics camps targeted at grade school students to promote awareness of STEM

FIRST Robotics Team #5907

Team Captain

Novi, MI

September 2017 – May 2019

- Orchestrated fundraising blitz that raised over \$5000
- Coordinated sub-teams in determining optimal architecture for software, mechanical and electrical systems
- Led team meetings and design reviews to ensure good communication between sub-teams
- Assisted sub-teams in all areas for an average of 30 hours a week during the 6 week build process

SKILLS

Computer:

- Proficient: C++
- Developing: MATLAB, Java, HTML, Linux, Git

Mechanical:

- Developing: Welding, Mill, Lathe, Shopbot

ACTIVITIES

Brazilian Jiu-Jitsu

2014 – Present

Catholic Campus Community

September 2019 – Present

Entrepreneur (Lawn Care)

2016 – 2019