Matthew Moliassa

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EDUCATION

University of Michigan, Ann Arbor, MI   Expected April 2022

Bachelor of Science in Engineering; Computer Engineering; Cumulative GPA: 4.00/4.00

- Relevant Coursework: Programming and Introductory Data Structures, Discrete Math, Intro to Logic Design, Designs in Nature/Engineering, Organizational Management, Data Structures and Algorithms (Winter 2020)

Canton High School (P-CEP), Canton, MI; GPA: 4.29/4.00   June 2018

- 4-year Engineering Academy Student; Activities: Boy Scouts, U-M MASA Rocket Payload Development

EXPERIENCE

University of Michigan - Walter E. Lay Automotive Engineering Laboratory   Ann Arbor, MI

Research Assistant   May 2019 – Present

- Managed experimental setup for a multi-fuel military tactical generator research project
- Integrated several acquisition systems and sensors into a data-acquisition cart for flexible engine benchmarking
- Optimized test-cell infrastructure (water/exhaust piping) for multi-engine testing
- Modified small generator engine; used CAD to fabricate an extension piece to ensure reliable air temperature and pressure readings

Charter Township of Canton - Public Works   Canton, MI

Geographic Information Systems (GIS) Intern   May – July 2018

- Engaged in ArcGIS Pro software training that covered 2D/3D mapping, analytical tools, and data manipulation
- Utilized ArcMap software to input utility information into a citywide geographic database
- Completed an individual project that involved digitally mapping sewer features, reading and processing engineering plans, and inputting elevation data
- Contributions developed Canton's GIS database and will help city workers with future positioning verification

Ford Motor Company   Dearborn, MI

Powertrain Supplier Technical Assistance (STA) Intern   June – August 2017

- Engaged in company-issued engineering quality tools training (process capability, six sigma, Minitab)
- Processed and compiled technical information on over 70 parts suppliers into a data map that is now standard reference for STA engineers and managers
- Assisted engineers in on-site supplier evaluations and meetings to ensure industry quality standards were met

University of Michigan – Dearborn   Dearborn, MI

Computer Science Research Mentorship   June – August 2017

- Learned about automotive cybersecurity research with computer engineering professor, explored exploitation software, utilized MATLAB basics, wrote summary paper on security risks of connected vehicles

PROJECTS

Object-Retrieving Robot (ENGR 100 coursework)   January – April 2019

- Designed and constructed competition Robot to place items in an elevated goal; adhered to sustainability constraints

Engineering Capstone Project   September 2017 – May 2018

- Developed an affordable automated door system for household use to relieve physical human mobility limitations
- Collaborated in team of four; responsible for entire engineering design process (hardware and software)

BSA Eagle Scout Project   May 2016 – January 2017

- Constructed high-quality furniture pieces for the benefit of women and children at a local domestic abuse shelter
- Independently managed 20+ workers in large-scale work sessions, organized fundraising efforts totaling $800, collaborated with nonprofit executives and local businesses, oversaw and devised entire project process

SKILLS

Software Tools: Arduino, ArcMap, ArcGIS Pro, Autodesk Inventor, Bootstrap, C++, HTML/CSS, MS Office, MATLAB, Verilog

Language: German (Intermediate), Spanish (Basic)

HONORS/AWARDS

Ford Motor Company Blue Oval STEM Scholarship   September 2018

Plymouth Student Citizenship Award   May 2018

BSA Eagle Scout Award   April 2017