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: 3.96/4.00

- Relevant Coursework: Data Structures and Algorithms, Programming and Introductory Data Structures, Discrete Math, Logic Design, Electronic Circuits; Fall 2020: Computer Organization, Machine Learning, Signals and Systems

EXPERIENCE

General Electric Aviation — Detroit, MI
Digital Technology Intern – Data Integration and Enterprise Software — May 2020 – Present

University of Michigan - Walter E. Lay Automotive Engineering Laboratory — Ann Arbor, MI
Research Assistant — May 2019 – March 2020

- 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 a 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
- Completed a project that involved digitally mapping sewer features, reading and processing engineering plans, and utilizing ArcMap software to input utility data into a citywide geographic database
- Contributed 8000 data features to Canton's GIS database to help city workers with future positioning verification

Ford Motor Company — Dearborn, MI
Powertrain Supplier Technical Assistance (STA) Intern — June – August 2017

- 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

Recipe Generator Web Application — May 2020 – Present

- Developing a web application that takes in ingredient inputs and generates relevant recipes from a public API

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

- Designed and constructed competition Robot to place items in an elevated goal; delivered design review presentations

Automated Door System (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/TOOLS

Software Tools: C++, JavaScript, Verilog, MATLAB, Bootstrap, HTML/CSS, ArcMap, ArcGIS, Autodesk Inventor,
Language: German (Intermediate), Spanish (Basic)

HONORS/AWARDS

Ford Motor Company Blue Oval STEM Scholar — September 2018
BSA Eagle Scout Award — April 2017