# 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, Computer Vision, Signals and Systems

## EXPERIENCE

**GE Aviation**                                                                                                    Detroit, MI
Digital Technology Intern – Data Integration and ERP Software                                          May – August 2020
- Managed creation of ERP integration data inventory by planning technical contents, meeting with global product owners, and designing a hosting solution; Inventory is a central reference for software deployment and PM teams
- Created metrics dashboard to track BusinessObjects app usage by querying license database with SQL and parsing with C++; Dashboard insights led to removal of 2700 unused permissions (85% of users) and budget controls on user licenses
- Collaborated in intern hackathon; created MVP optical character recognition tool for faster processing of engine repair logs; experimented with Microsoft CV API and Python tesseract

**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 generator engine; used CAD to fabricate extension piece for reliable air temperature and pressure readings

**Charter Township of Canton - Public Works**                                                                   Canton, MI
Geographic Information Systems (GIS) Intern                                                              May – July 2018
- 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
- Engaged in ArcGIS Pro software training that covered 2D/3D mapping, analytical tools, and data manipulation

**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

## PROJECTS

**Recipe Generator Web Application**                                                                     May – July 2020
- Developed Node.js app that processes ingredient inputs and displays relevant recipes from a public food API
- Implemented MongoDB caching to reduce expensive API calls and speed up recipe searching

**Object-Retrieving Robot**                                                                         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 – Furniture for First Step Domestic Abuse Shelter**                  May 2016 – January 2017
- 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 & HONORS

**Software Tools:** C++, JavaScript, Node.js, MATLAB, MongoDB, Bootstrap, HTML/CSS, Arduino, Autodesk Inventor, Verilog
**Honors**: *BSA Eagle Scout Award* (2017), *Ford Blue Oval Scholar* (2018), *James B. Angell Scholar* (4 terms, 2018-2020)