\(\bigcup (416)-912-2306 | \Dispress p37agarw@uwaterloo.ca | \(\bigcup \) parthag1202 | \(\bigcup \) parth-aga12.github.io | \(\Omega\) parth-aga12

SUMMARY OF QUALIFICATIONS

- Proficient with MATLAB, Arduino, Oscilloscopes, Office 365, AutoCAD/SolidWorks, PCB/Circuit design, Latex.
- Experience with Java, JavaScript, HTML, CSS, Python (numpy, math), Kotlin, XML, I2C protocol and LabVIEW.
- Familiar with AM, C++, Raspberry Pi, and NI myDAQ.
- Influential leadership, communication, and teamwork skills used to complete projects at the NRC and MSAM Labs.
- Excellent **Time-management skills** displayed by strong performance in stressful situations while characterizing a **dozen** materials at MSAM Labs, and by working on a MATLAB and LabVIEW **coding project** at the NRC.
- Achieved an Excellent performance rating at MSAM Labs by displaying ability within a professional lab and office environment.
- Received a grade of **100%** in NE 113: Computational Methods, and averaged **above 95%** on MATLAB assignments throughout NE 216 and NE 217: Advanced Calculus I and II, demonstrating skill in **applied math and programming**.

EXPERIENCE

Research Assistant: Additive Manufacturing Materials Developer

May 2021 - Aug 2021

MSAM Labs | Waterloo, ON

- Demonstrated distinct Critical Thinking skills by Updating Standard Operating Procedure of various machinery and creating a standard powder labelling system, enhancing workflow and organization for all current and future lab members.
- Efficiently Characterized, analyzed data and completed reports for 12 metal powders with error in raw data within only 5% exhibiting decisive work ethic and organization.
- Displayed dexterous multitasking skills while operating equipment such as the Granutools suite, FT4 Powder Rheometer and Camsizer X2 PSD analyzer to finish all projects 2 weeks ahead of schedule.
- Trained 3 inexperienced Co-op students and a **PhD candidate** on lab protocol and characterization machinery on short notice displaying dynamic **leadership**, **communication**, **responsibility** and **time-management skills**.

Lab Assistant: Black Carbon Metrology

Jan 2022 - April 2022

NRC | Ottawa, ON

- Repackaged a state-of-the-art methane sensor to perform atmospheric measurements on NRCs proprietary aircraft.
- Developed cross-team communication skills while engaging with both NRCs Black Carbon Metrology and Aerospace divisions.
- Pair-programmed a **MATLAB** simulation that focused a laser using a convex lens.
- Reduced calculation time of a LabVIEW model which converted raw detector input to an absorption spectra by 80%.
- In LabVIEW, created a data pipeline to organize large data pools of input metrics including atmospheric readings (temperature, humidity, pressure) and real-time spectra values for future analysis.

PROJECTS

Chrome Extension

JavaScript, HTML, CSS

- Developed a Chrome Extension with a simple and effective UI/UX in 1 day that allows users to save websites for future use displaying time management skills and self-sufficiency
- Displayed understanding of development concepts such as HTML, CSS and JavaScript and API integration (Chrome).

EDUCATION

Candidate for BASc Nanotechnology Engineering Co-op

Sept 2020 - Present

University of Waterloo | Waterloo, ON

- President's Scholarship
- 1B Term Dean's Honours List