

MARAWAN A. KENAWI



(604) 318-2133 | marawankenawi@gmail.com | 2675 Trafalgar Street, Vancouver, BC

OBJECTIVE

Enthusiastic university graduate in the fields of mechanical and aerospace engineering with great experiences in and out of the classroom. Extensive experience in engineering, management, research and development, leadership and mentoring, systems testing and problem solving.

EDUCATION

University at Buffalo, Buffalo, NY

Sept. 2013 – May 2017

B. Sc. Mechanical Engineering
B. Sc. Aerospace Engineering
Minor Mathematics

Graduated **Summa Cum Laude** Overall **GPA: 3.761/4.0**. Technical **GPA: 3.84/4.0**

EXPERIENCE

Queen's University/Bombardier Aerospace

Research Engineer | August 2017 – August 2018

Worked at TSM Lab in investigating new methods to enable the analysis and prediction of transitional flows over airfoils.

- Authored a comprehensive theoretical study on the effects of compressibility on flow stability.
- Performed numerical analysis to predict flow transition for developing boundary layer.

Zehnder Rittling

HVAC Engineer | June – September 2017

Worked in the areas of electro-mechanical design, development, and performance testing of terminal products for an HVAC company.

- Designed HVAC equipment to meet client's requirements in industrial and residential projects.
- Analyzed and implemented solutions to optimize performance and increase the operation efficiency.
- Communicated with customers to understand project requirements and design specifications.
- Created models for insulation and valve packages for heating coil units.

Product Logic

Mechanical Design Intern | January – May 2017

- Provided design solution through product development and prototype fabrication.
- Designed a small custom hockey practice robot and a portable racquetball warmer.

Advanced Manufacturing Lab at University at Buffalo

Undergraduate Student Assistant | August – December 2016

- Tested and operated advanced 3D printing equipment.
- Ran SolidWorks tutorial workshops for student groups.

Aquatech International Co.

Student Intern | June – August 2015

- Developed an interactive equipment database software.
- Coordinated operation and used design software and equipment for engineering tasks.

ADMINISTRATIVE EXPERIENCE AND PROJECTS

American Society of Mechanical Engineers (ASME)

Student Chapter President | April 2015 – May 2017

- Developed an annual budget and sponsorships of over \$18000, to provide funds for social and professional events, and projects including Combat Robot, Solar Boat.
- Oversaw 250-member chapter, communicating with other engineering and non-engineering student chapters on campus to coordinate joint events and community work.
- Acquired sponsorships from giant companies and professional chapters for national competitions.

University at Buffalo ASME Combat Robot

Team Captain | April 2014 – May 2016

- Designed and Built a pneumatic system flipper bot to compete in a Championship

Queen's University SAE Formula

Team member | September 2017 – August 2017

- Designed 3D model and code for an active toe for rear push rods suspension system.

Bombardier Aerospace - Compressibility Effects on Flow Stability

- Analyzed the effect of compressibility on flow stability of a developing boundary layer.

University at Buffalo - Analysis of a Turbojet

- Analyzed the efficiency of a turbojet engine burning JP8 fuel at various flow conditions.

University at Buffalo/Moog Inc - Commercial Aircraft Design

- Collaborated with a team of four peers to design a heavy business jet that can accommodate 100 passengers while incorporating the design specifications and performance parameters of a long-range commercial airliner.

Senior Design - Closed Loop Irrigation

- Designed an affordable add-on to irrigation system to control water supply autonomously.

SKILLS

Programming Fortran, C/C++, MATLAB, Latex, Python

Applications SolidWorks, AutoCAD, Fusion 360, ParaView, ANSYS, CATIA 5, OpenFoam, Cura, MS office (Word, Excel, PowerPoint, Access)

Platforms Linux Ubuntu, Windows, MacOS

Languages Fluent in English and Arabic, Intermediate in French, and Beginner in Italian

HONORS AND AWARDS

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| • ASME Young Lee Scholarship | 2015 |
| • Tau Beta Pi | 2014 |
| • Dean's list all semesters, University at Buffalo | 2013 -2017 |
| • Faculty of Applied Science Graduate Award, UBC | 2018-2020 |

REFERENCES ARE AVAILABLE UPON REQUEST