



SUMMARY OF QUALIFICATIONS

- Over 400 hours of laboratory experience cultivated through fabricating OLED devices, conducting wet etching, and performing mechanical material testing
- Project-oriented experience in SolidWorks, ANSYS, MATLAB, JavaScript, Python, Excel
- Analytical skills developed by using data to draw conclusions and create experimental designs in a lab setting
- Developed project management skills through leading engineering projects with strict timelines



EXPERIENCE

Process Engineer | OTI Lumionics

MAY 2019 – AUGUST 2019

- Worked in a research & development environment to develop advanced technological solutions for the production of Organic LEDs (OLEDs)
- Increased throughput of OLED devices by 400% through optimizing OLED process line
- 200+ hours of cleanroom experience testing process line and maintaining vacuum technology
- Led performance, degradation, and defect testing on over 4000 OLED devices

Research Assistant | Functional Nanomaterials Group, Nano and Micro Systems Lab

DECEMBER 2018 – PRESENT

- Successfully wet etched FTO glass with Zinc powder and HCl to use during perovskite solar cell fabrication
- Improved efficiency of FTO and ITO etching process through engineering an etching mechanism using SolidWorks and 3D printing
- Performed 100+ hours of scientific literature review to write a review paper on plasmonic biosensors, currently working on updating a research paper regarding graphene contact resistance

Mechanical Team - Project Lead | Waterloo Airlock Design Team

SEPTEMBER 2018 – AUGUST 2019

- Led creation of hatch system to connect airlock to the atmosphere of Mars using SolidWorks and ANSYS
- Collaborated with large team to meet strict deadlines, while communicating through GrabCAD, Slack, and other work-flow organizational tools



PROJECTS

Gelatin and Starch-Based Bioplastics | Laboratory Skills

- Prepared various bioplastics through heating and drying various gelatin and starch-based mixtures
- Conducted mechanical material testing to investigate various properties of the bioplastic

Space Jousting | Unity, C#, Arduino

- Created a fully functional recreational application using various components of C# and Unity
- Incorporated ultrasonic sensor based hands-free remote control into the game using Arduino



EDUCATION

Candidate for BSc in Nanotechnology Engineering | University of Waterloo

SEPTEMBER 2018 – APRIL 2023