Stefan Adamski

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Summary of Qualifications

- Proficient in **AutoCAD and SolidWorks**, intermediate knowledge in C++, Java, and Python.
- Excellent problem-solving skills to implement designs and retrofit existing production equipment and new machinery.
- Collaborative team member at AOMS to coordinate with electrical and firmware engineers to develop **consumer products.**
- Proficiency in rapid prototyping with **CNC routing**, stereolithography **3D printing** and practical **machining.**
- Adaptable and self-motivated to learn new technical skills to display creativity in various hobby projects.
- Ability to perform wood prototyping, **metal part fabrication**, airline plumbing and machine assembly.

Experience

Mechatronics Engineer | Vuereal Inc.   Sept. – Dec. 2021

- Independently designed and fabricated 2" – 8" adjustable micro-LED display fixtures for colour calibration.
- Conducted revisions and redeveloped thermal testing fixture for 60°C thermal cycling of micro-LED displays.
- Designed and laser-cut packaging for sensitive uncoated micro-LED displays to ensure low-cost and reliable shipping to clients.

Mechatronics Associate | Litens Automotive Group and OtoLawn Inc.   Jan. – April 2021

- Effectively communicated with stakeholders to design and model an external 12-volt solar panel accessory and mount.
- Developed a simple and reliable screw counters for hand operation in low volume assembly lines with batch sizes of 6, 8, 12 & 14
- Created and conducted smart sprinkler testing for coverage mapping, pump testing and motor endurance.

Product Developer – Mechanical | AOMS Technologies Inc   Sep. – Dec. 2019, June – Aug. 2020

- Designed and prototyped sensor cable strain relief exceeding the cables tensile capacity of 170 lbs saving a $2,000,000 project.
- Designed, and constructed fixtures for PCBs, finished products, sensors, and in-house assembly using SLA 3D printing.
- Efficiently laid out internal mechanical stack-up of the Optical Data Acquisition Gen 3, High Speed ODAQ, and Weather Node.
- Designed compact mounting bracket to be universally applied to various Weather Node, Node, and Gateway Antenna products.
- Adhered to **GD&T** practices to successfully draft detailed part drawings and packing of products.

Mechanical Engineering Co-op | Unicell Ltd   May – Aug. 2018, Jan. – April 2019

- Formulated, designed, and constructed multiple portable laser alignment systems reducing worker adjustment time by 80%.
- Redesigned and **metal fabricated** loadbearing truck-body moving equipment with the ability to withstand 2000 lbs.
- Wired and **soldered** high pressure **hydraulic** plumbing and remote-control actuation.
- Debugged, tested, trouble-shot, and redesigned prototype machinery with PLC control to improved end-user experience.

Projects

Safesound Surgery Capstone | University of Waterloo   April 2022

- Collaborated with a team of 6 peers to research and produce an innovative cancer treatment system utilizing HIFU technology.
- Designed and implemented the real time mechanism for 3D ultrasound imaging technology of the system.
- Won $10,000 from the Norman Esch competition, best mechanical capstone, people's-choice capstone, and best medical capstone.

Ozone Sterilizer | University of Waterloo   April 2021

- Achieved outstanding design award for prototype of home ozone sterilizer product in Covid-19 relief design project.
- Performed electrical design and fabrication for ozone generation system with high voltage electricity system.

Hobbies and Interests

- Demonstrates creativity from designing, modelling, woodworking, machining, and leather working various hobby projects.
- Utilized extensive **flux core welding** and **soldering** experience to fix broken household products and consumer electronics.
- Developed expertise in heat treating steel to handcraft homemade knives and artistically designed a makers-mark branding in a self-designed hobby metal foundry/forge capable of metal brass and steel.
- Written scripts in python for computer automation and macros.

Education

Bachelor of Applied Science in Honours Mechanical Engineering with a Welding and Joining Specialization   2017-2022

University of Waterloo, Waterloo, Ontario