Austin **Luu**

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EDUCATION

Ryerson University *Toronto, ON, Canada*

B.Eng in Mechanical Engineering *Sep. 2016 — May 2020*

- CGPA: 3.90 | Dean's Honour List
- Received Mechanical Eng. First Year Alumni Awarded for being one of the top three highest academically achieved students in my program for the 2016/2017 academic year
- Received Robotics International/Society of Manufacturing Engineers Award for outstanding academic performance and contribution to the field of robotics
- Relevant Courses: Stress Analysis, Mechanics of Machines, Manufacturing Fundamentals, Microprocessor Systems, Fluid Mechanics, and Applied Thermodynamics

PROJECTS

Bionic Arm

Team Project @ Ryerson Rams Robotics *Mar. 2018 - Present*

- Designed and developed a prosthetic arm offering 19 degrees of freedom using Arduino mega, C, and 3D printing
- Implemented a $150 budget design to further the field of bio-mechanics in hope of making prosthetics more accessible and versatile

Parallel Computing Drone Swarm

Team Project @ PennApps Hackathon *Sep. 2018 — Sep. 2018*

- Designed system and hardware architecture for a hazard detection 2D mapping software which collects thermal, moisture, and relative location data from two autonomous IoT enabled ground drones
- Developed with: Python, C/C++, MQTT Protocol, laser cutting, 3D printing, and Arduino 101s

UFbOat

Team Project @ Ryerson University *Sep. 2017 — Dec. 2017*

- Evaluated project requirements for designing a maritime life support system in the Caribbean sea to develop maritime escape and life support for smaller scale usage
- Designed an emergency lifeboat following the engineering design practices; project initialization, problem analysis, system design, subsystem recursion, and detailed design

EXPERIENCE

Ryerson Rams Robotics *Toronto, ON, Canada*

Mechanical Lead *Sep. 2016 — Present*

- Led a team of 10 in designing and developing a robot capable of expanding 150cm in height, repetitive lifting of 10lb, and omni-directional drive; winning a spot in the international VEXU 2018 competition
- Project manage a team of 35+ in developing a robot for the VEXU 2019 competition to place 1st nationally
- Evaluation and development of technical enhancements and modifications to existing design, increasing product performance and failure reduction by over 50%

Home Staging by K *Brampton, ON, Canada*

Lead Web Developer *Sep. 2016 — Present*

- Lead planning, design, and implementation of new and existing web services, websites and applications; including an online report pipeline and a user-friendly front-end with JavaScript, CSS, HTML, using WordPress CMS
- Applied evaluation and development efforts of technical enhancements and modifications; defined, scoped and documented requirements for new websites and web services leading to 20% increased user pool

Megamind Abacus *Brampton, ON, Canada*

STEM Tutor *Mar. 2017 — Oct. 2017*

- Provided educational guidance to classes of 3+, increasing academic performance of students by up to 20%
- Designed personalized educational curricula for 40+ individuals, promoting student's study methods and needs

TECHNICAL SKILLS

Software SolidWorks, AutoCAD, Microsoft Office, Adobe Photoshop

Programming Languages JavaScript, Java, C, Python, MATLAB

Tools and Frameworks HTML, CSS, React, Node.js/Express, Git, Android Studio, OpenCV, jQuery