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EDUCATION

Cornell University

Ithaca, NY

Bachelor of Science in Electrical and Computer Engineering (ECE)

September 2019 – May 2021

- Transferred from University of Toronto after Sophomore Year
- Relevant coursework: Electromagnetism and Waves, Electric Power Systems, Digital Signal Processing

University of Toronto, St. George

Toronto, ON

Bachelor of Applied Science in Engineering Science

September 2017 – May 2019

- Dean's List (all semesters)
- Relevant coursework: Digital Logic and Computer Organization, Differential Equations, Computer Algorithms and Data Structures

EXPERIENCE

Helmy Group – Photonics @ University of Toronto

Toronto, ON

Undergraduate Researcher, Supervisor: Prof. Amr Helmy

May 2019 – August 2019

- Developed a MATLAB numerical solver for Degenerate and Non-degenerate Four-Wave Mixing (FWM) in semiconductor devices
- Code can be accessed at: https://github.com/robinlin99/Four-Wave_Mixing

Optical Materials and Devices Laboratory – National University of Singapore

Singapore

Undergraduate Researcher, Supervisor: Prof. Andrew Bettiol (Physics Department)

May 2018 – August 2018

- Collaborated with a postdoctoral student on the development of a TCSPC system for TRPL Spectroscopy
- Abstract was accepted to Undergraduate Engineering Research Day

aUToronto Self-Driving Car Team

Toronto, ON

Electrical Hardware Team Member

January 2018 – June 2018

- Developed the power system of the Bolt EV vehicle with a team of four engineers for the SAE AutoDrive Challenge in Yuma, Arizona

University of Toronto Robotics Association, RoboSoccer Team

Toronto, ON

Mechanical Team Member

September 2017 - Present

- Utilized Computer-Aided Design (Autodesk Fusion 360) and 3D Printing technology to design and prototype the arm component of a humanoid robot in preparation for the 2018 RoboCup

Smart Polymers and Composites Lab (SAPL) – University of Toronto, St. George

Toronto, ON

Research Intern, Supervisor: Prof. Hani Naguib (MIE Department)

June 2017 – September 2017

- Conducted research on the fabrication process and feasibility of carbon nanotube thin films as cathode and electrocatalyst of Zinc-Air batteries
- Utilized scanning electron microscope, thermal gravimetric analysis, and fourier-transform infrared spectroscopy to characterize the thin films

Sherman Health Science Research Centre – York University

Toronto, ON

Research Intern, Supervisor: Prof. Michael Jenkin (EECS Department)

June 2017 – September 2017

- Developed a foot-mounted modular inertial navigation system implementing a zero-velocity update algorithm (ZUPT)
- Utilized MATLAB, circuit-design software, and 3D Printing technology to design, program, and prototype the software and hardware components of the system

Major League Hacking (MLH)

May 2017 – Present

Hackathon Participant

- Participated in four hackathons in North America, including Hack the North, HackPrinceton, and HackMIT
- Developed a brain-computer interface that detects increases in stress levels using the MUSE EEG headband at Hack the North

AWARDS

- **Rensselaer Medal**, awarded to top 20,000 students worldwide for achievements in engineering, mathematics, and science
- **HackMIT – Best Use of DocuSign eSignature API**, awarded at the 2018 undergraduate hackathon at the Massachusetts Institute of Technology

SKILLS

Software: Python, C, Arduino, HTML/CSS, MATLAB, Autodesk Fusion 360, SolidWorks, Verilog, ARM Assembly

Laboratory: SEM, FTIR, TGA, Chronopotentiometry, Cyclic Voltammetry, Tensile Testing, Gel Electrophoresis, PL Spectroscopy, TRPL