

RYAN LI

Waterloo, ON
(647)-966-9330
liryan914@gmail.com
[/in/ryanli1](#)
[ryhli.com](#)



A self-motivated 2A Nanotechnology Engineer at the University of Waterloo, The Knowledge Society Alumni, and SHAD Fellow who is passionate about nanotechnology, entrepreneurship, and bringing impact to the world through technology.



SUMMARY OF QUALIFICATIONS

- Project-Oriented experience in using literature to create and procedures of experiments in a laboratory setting.
- Experience in JavaScript, Python, HTML, CSS, Excel, and Solidworks, Web development, Materials science in EduPack, MATLAB, COMSOL. and mobile app development
- Skillful at conducting presentations with experience presenting for Velocity \$5K competition and research poster at the MINE Summit 2019 in Shanghai
- Strong interpersonal skills and experienced in leading teams



EXPERIENCE

Research Assistant | Southeast University, Key Laboratory of MEMS of Ministry of Education China

May 2019 – September 2019

- Worked on **Electrical Impedance Spectroscopy (EIS) simulations** of a *S. Pombe* cell cycle using **COMSOL and MATLAB** to extract **equivalent circuit model (ECM)** values of cell components
- Clean room experience working with **PDMS and nanomaterials, microbiology, fabrication of microfluidics chips** for EIS
- Presented **research poster** at the **Microsystems and Nanoengineering Summit (MINE) 2019** in Shanghai, China

Technical Team member and Micro-fabrication Lead | University of Waterloo NanoRobotics Group

SEPTEMBER 2018 – PRESENT

- Worked on the **Solenoid Actuated Microrobot (SAM)** through **PCB manufacturing, solenoid manipulation through Arduino control systems, optical microscope, and C++ code**
- **Selected to be one of two students** to be trained and working in a clean room at CIRFE in **the microfabrication of the silicon wafer for the microrobot** to perform ICRA challenges on such as navigation and assembly
- Worked with **photolithography techniques, PECVD, wet etch and dry etch, compressed gas management, stock solutions, CMP** and, **learned the mentality needed for research**

Volunteer Research Assistant | Professor Ting Tsui at University of Waterloo

JANUARY 2019 – PRESENT

- **Trained in Scanning Electro Microscopy (SEM) techniques** to help graduate students image their samples and work in lab settings

Co-Founder | Omicron

OCTOBER 2017 - PRESENT

- Developed a platform to be used at hackathons for sponsor ROI through **Angular JS, Firebase, and front-end web development**
- Helped organize hackathons for various corporate groups and schools including **Red Bull AdrenaLAN, JAM Hacks, Hack the Hammer, THacks 2, and Pentahacks**

Intern | Careerleaf

AUGUST 2017 – AUGUST 2017

- Developed a program to help organize and transfer data of financial statements from older versions of **Quickbooks to newer versions through python and UX/UI design on Invision**
- Drove sales up from previous quarter through **data aggregation of potential clients through LinkedIn and excel spreadsheets**



PROJECTS

Technology Articles | Medium Posts and Personal Website

OCTOBER 2017 – PRESENT

- **Created articles** focusing on several concepts, including the **basics of lithography, cancer research, and applications of nanotechnology**
- Review of the **MINE Summit 2019** in Shanghai, China focusing on **M/NEMS, Microfluidics Devices, and Biosensors**

Hacker | Hack the 6ix

AUGUST 2017

- Created a platform for millennials to invest on that takes out the various challenging variables in investing through **Quandl APIs, Python scripts, and a chatbot built on Kik**



INTERESTS

Hackathons (Participated and organized over 15), Auditing Coursera Courses (Audited 2 Nanotechnology and Sensors Courses), Music, Working Out, Reading Research Papers, Sprinting, and Learning. Fluent in English, Mandarin, Cantonese and French