**RICHARD HU**

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**EDUCATION**

**Undergraduate 3rd Year Mechanical Engineering September 2013 to Present**

University of Toronto St. George Campus, Toronto, ON  **CGPA: 3.74/4.00**

* Specialize in Bioengineering and Mechatronics. Robotics and Mechatronics minor

**Basic Machining Course March 2015**

George Brown College, Toronto, ON

**Grants and Awards**

* Shell Canada Limited Engineering Scholarship **July 2015**
* University of Toronto Excellence Award **June 2015**
* Dean’s Honour List **June 2014**

**TECHNICAL SKILLS**

**Analysis Programs:** ANSYS, MiniTab, PSpice, ImageJ, ImageMagick

**Design Program:** Solidworks

**Microsoft Office:** Microsoft Word, PowerPoint, Excel, Publisher, Outlook

**Technical Knowledge:** Mechanical systems design, Manufacturing process, Machining

**Language:** Fluent Mandarin, Fluent English

**JOB EXPERIENCE**

**Spray and Atomization Lab of Nassar Ashgriz June 2015 to September 2015**

Independent Researcher

* Designed and built experimental processes for droplet breakup dynamics observation under air jet impingement via pipes, aluminum extrusions and tube fittings. Including circuits with Arduino as micro controller to synchronize Nikon DSLR camera and solenoid valve.
* Gathered quantitative datum on droplet breakup modes, and performed analysis of the datum using Minitab, ImageJ, Imagemagick and Powershell.
* Discovered and classified 13 new droplet breakup phenomenon.

**New Start August 2014 to September 2015**

Tutor

* Tutored 6 students who struggled in their curriculum. Ranged from grade school, high school physics and chemistry, to 2nd Year University of Toronto student.
* Assisted students in defining study goals and formulate personal study methods.

**DESIGN EXPERIENCE**

**CNC Milling Machine September 2014 to December 2014**

2nd Year Mechanical Engineering Design Project

* Designed a CNC milling machine using SolidWorks in a team of 5.
* Lead the group by coordinated the group’s workflow planned team’s work schedule and internal milestones. Proactively engage in productive criticism with team members to ensure team

**Cricket Canada Sunnybrook Park Pavilion Renovation January 2014 to May 2014**

1st Year APS112 Design Project

* Designed a 2nd floor’s plan for the renovation of Cricket Canada’s Toronto head quarter in a team of 5.
* Drove the team to meet deadline and make sure a rigorous design schedule was followed.
* Reviewed all the report written by the team to ensure client standards are met.

**EXTRA-CURRICULAR**

**Skule Stress Release Club January 2015 to May 2015**

Vice President

* Organized and executed events in a team of 13 to relieve stress of engineering students.
* Collaborated with club president to apply funding and present the club in front of UTSU funding committee.

**University of Toronto Engineering Kompetition Junior Design January 2015**

Competition Award Winner/Team Leader

* Lead a team of 4 to compete against 26 other engineering teams in the competition to create a design and presentation from scratch in 5 hours.
* Received “Best Innovation Award” and “Best Prototype Award” certificates.

**PERSONAL INTERESTS**

**Musical Instruments**

* Performed trumpet, piano in the past at several events and venues, including Massy Hall, Toronto center for the arts, was an active member of jazz, orchestra band.

**Psychology and Philosophy**

* Enjoys psychological analysis, highly interested in IBTI test and personality types. Thrives on philosophical conundrum and debates.

**Jogging**

* 5 to 6 km jogs for 2 to 3 times a week. Highly enjoys the sensation of bodily freedom during jogging.