

### RELEVANT EXPERIENCE

#### Research Assistant Scientist

Vision and Image Processing Research Group May 2016 - Present

- Regularly used Matlab, Arduino, Solidworks, 3D print software and Eagle PCB design software
- Electrically, optically and mechanically developed and tested parts of a hemodynamic imaging system
- Culminated in a conference paper and presentation
- Full-time summer co-op; part-time fall URA

# Cybathlon Powered Arm Team Bio-mechatronics Club, University of Waterloo

Jan 2016 - Present

- Collaboratively researched and implemented Myo-Arduino hardware-software interfaces
- Prototyped mechanical housing and motion system for a user-controlled powered prosthetic arm

# Biomedical Global Health Design Project University of Waterloo

Sep - Dec 2015

 Collaboratively analyzed a global issue to organize and present a design plan, CAD models, iterative prototypes and performance tests

# **NOTABLE AWARDS**

Winter 2016 (1B) Term Dean's Honours List
President's Research Award
N.S.E.R.C. Undergraduate Student Research Award
President's Scholarship of Distinction
Valedictorian
Senior Female Athlete of the Year

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### **SKILLS**

Solidworks (CAD) Matlab **Performance Testing Machining Rapid Prototyping** PCB Design Circuit Evaluation Arduino Biology/Biomechanics C++Leadership C# Teamwork R **Independent Learning Initiative** 

## **PUBLICATIONS**

Communication

M. Wilson, R. Amelard, D. A. Clausi, A. Wong, "Co-integrating thermal and hemodynamic imaging for physiological monitoring," *Journal of Computational Vision and Imaging Systems*, Submitted, Sep 16 2016.

Research

# **INTERESTS**

UW women's fastball team member Minor girls' softball head coach Engineering O-Week Leader 2016 Competitive hockey ORCKA Canoe Tripping Level 1 Emergency First Aid and CPR 'B'

University of Waterloo Apr 2016
University of Waterloo Sep 2016
VIP Research Group May 2016
University of Waterloo May 2015
Thornlea Secondary School Jun 2015
Thornlea Secondary School Jun 2015