

# Amber Donnelly

3rd Year Engineering Physics Student (Software Engineering Focus)

## SKILLS

- Programming experience:  
C (and Arduino), C++, Java, Matlab, HTML, CSS, JavaScript, C# (learning)
- Glider Pilot License and Private Pilot License
- French (beginner speaking/intermediate reading)

## PROJECTS

- Personal CV Website (2017) (<https://amberdonnelly.github.io>)
  - HTML, CSS, and JavaScript
- Autonomous Robot for ENPH 253 (Introduction to Instrument Design) Competition (2017)
  - In a team of 4, designed, manufactured, and programmed an autonomous robot to complete the specified challenge and compete against other robots
  - Was the primary developer of the team's final project website: <https://channel4robotteam.github.io/>
- APSC 101 Arduino Claw (2016)
  - Was part of a team of 6 which designed, built, and programmed a robotic claw that could open and close automatically to pick up objects
- Programming Projects
  - Created a craps game in C using Visual Studio
  - Used Visual Studio to write a DAQ program in C to write sensor information to a 7-segment display
- AASC (Advanced Aerospace Summer Course) Spacecraft Design Project (2013)
  - Project was to design a reusable spacecraft to collect and recycle space debris
  - Leader of the 4 person sub-team for 'Launch, Recovery, and Reuse' in larger team of 20
  - Won the AASC Top Project award for 2013

## WORK EXPERIENCE

### **Linespect, Richmond, BC** - *Application Developer (Co-op)* - Jan 2017 - May 2017

- Improved the LineSpector user interface using QML and C++
- Supervised and controlled flights of the UAV during tests
- Developed training and promotional materials for clients

### **UBC Access and Diversity, Vancouver, BC** - *Notetaker* - 2015

- Was responsible to attend every class to take notes
- Scanned and emailed notes to multiple clients within 48 hours of class
- Answered clarification questions from clients

### **Safeway, Brandon, MB** - *Cashier* - 2015

- Scanned and bagged groceries and memorized PLU codes for produce and baked goods
- Cleaned, organized, and stocked the area around my own workspace
- Responded to customer inquiries and complaints

### **Royal Canadian Air Cadets, Brandon, MB** - *Volunteer Familiarization Pilot* - 2014 - 2015

- Piloted familiarization flights for cadets and staff in Schweizer 2-33A gliders (air tow)
- Taught ground school
- Gave safety briefings
- Recorded timesheets and assisted with launching gliders

## INVOLVEMENT

### Volunteer

- UBC Engineering Competition Logistics Manager (present)
  - Currently coordinating the planning and organization of the annual competition, including, but not limited to, logistics planning, volunteer management, and recruitment of external judges
- Canadian Space Summit (2015)
  - Worked the admissions desk
- Senior Cadet at 82 Brandon RCACS (2014-2015)
  - Greatest Contribution to Aviation Award (2015)
  - CO's Honor Roll (2013)
  - Attended summer courses: General Training (2011), Basic Survival (2012), Advanced Aerospace (2013), Glider Pilot Scholarship (2014), Power Pilot Scholarship (2015)
- Peer Tutor at Vincent Massey High School (2012 - 2015)
  - Helped students with both humanities and math and sciences courses on a drop-in basis
- Brandon Jazz Festival (2011 - 2015)
  - Tasks included working the admissions desk, picking up litter, catering, and guiding groups
- Rotary Club of Brandon Annual Book Sale (2010 - 2015)

### Current Extra-Curricular Activities

- Trumpet player in Godiva Engineering Marching Band and Community Orchestra
- Gears and Queers (UBC Engineering LGBTQ+ organization)
- AOE Engineering Sorority

## EDUCATION

### University of British Columbia, Vancouver, BC - *Bachelor of Applied Science*

September 2015 - May 2020

- Engineering Physics major
- Major Entrance Scholarship recipient and Chancellor's Scholar
- 80% average and Dean's Honor List in first year

### Vincent Massey High School, Brandon, MB - *Diploma*

September 2011 - June 2015

- 8 AP credits
- 98% average

## AWARDS

- RCAC Hubbell Award (2015)
- Varsity Girls Rugby MVP (2015)
- RCAC Power Pilot Scholarship (2015)
  - Top Manitoba Cadet - PPS NW Region (2015)
- RCAC Glider Pilot Scholarship (2014)
- Dr. Peter Letkeman Scholarship for High Achievement in Chemistry (2014)
- Gene Researcher for a Week (2014)

## INTERESTS

- Playing and creating video games
- Movies, television, and film-making
- Reading and creative writing
- History