# **Brielle Chenier**

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## SKILLS LIST

- o Mechanical Design: Certified Solidworks Professional (CSWP), AutoCAD, 3D printing
- o **Programming:** Python, C++, Java, HTML/CSS and Javascript
- o Soft Skills: Leadership, Communication, Teamwork and Collaboration
- Languages: English and French

## **EXPERIENCE**

## **Solar Car Mechanical Team Member**

Waterloo, ON

University of Waterloo Solar Car Design Team

September 2020 - Present

- Designed tools to aide in manufacturing as well as a model car for sponsors in Solidworks
- Assembled carbon fiber and nomex to create layups for car structure and bottom panel
- Learned about engineering techniques for welding and built welding jigs for car main frame which will support 4
  passengers

## Team Captain, Robot Lead, and Outreach Lead

Bellevue, USA

FIRST Robotics, Robototes Team 2412

September 2016 - June 2020

- Led team meetings for 60 member team and oversaw 150lb robot build and integration, involved ordering all necessary parts and ensuring sub team leads effectively delegated tasks
- Designed 2019 climb system to lift robot 45cm using Solidworks and directed 10 team members to build and assemble,
   system was 80% effective at district competition, helping us become Quarter Finalists at the 2019 World Championships
- Planned and ran 30 STEM outreach events resulting in over 1,000 team volunteer hours per year, launched a robotics summer camp for students in grades 3-5 all of who had an increased interest in STEM after attending

#### Classroom Aide and Science Educator in Training

Seattle, USA

Pacific Science Center

Summer 2018, 2019

- Taught STEM lessons to students in grades K-8, topics included: programming, robotics, science and nature
- Increased communication skills by engaging struggling campers and enabling them to complete activities

## **PROJECTS**

## Package Pick Up System and Adjustable Camera Mount

Waterloo Aerial Robotics Group

September 2020 - Present

- Designed and fabricated a mechanism using servos and micro-controllers to pick up 4 in packages
- Developed a 2 axis camera stabilizer for a GoPro to be used in Unmanned Systems Canada Competition
- Programmed an arduino controlled arm to teach new members about PID control and create an interactive onboarding

## **Personal Website**

briellechenier.com

March - July 2020

- Self-taught HTML, CSS, and JavaScript in order to create a personal website
- Raised money for local non profits by using website to sell homemade face masks

## **EDUCATION**

#### University of Waterloo

Candidate for BASc in Mechatronics Engineering EngSoc Winter 2021 Educational Outreach Director 2020-2025

## **ACHIEVEMENTS AND INTERESTS**

- Interests: Basketball, Rock Climbing, and Music (Oboe and Flute)
- Accomplishments: Over 500 Volunteer Hours primarily in STEM Outreach, FIRST Robotics Dean's List Semi-Finalist, High School Engineering Faculty Award Winner