# Wyatt Wismer

(403) 836-7883
wismerw@mcmaster.ca
wyattwismer.me

## Education

**McMaster University** **Hamilton, ON** **August 2016 - Present**

Bachelor of Engineering Expected Graduation: June 2020

- **Maintained a 4.0 GPA,** across all first year courses.
- **Member of PhaseOne,** formerly known as HackItMac, McMaster's official community of coders, makers and technology enthusiasts.
- **Member of McMaster ACM chapter,** McMaster University's chapter for the ACM International Collegiate Programming Contest.

## Projects

- **WFMT - Python** An OpenCV application for the measurement of Whitefish. WFMT applies thresholding with minimum fitting polygons to automate standard measurements, dramatically reducing the workload on researchers and increasing overall efficiency by 280%.
- **FIRST Team 4733 Vision System - C++** A shooting system capable of tracking goals from retroreflective tape with OpenCV, determining distance via triangle similarity, and calculating firing angle through a linear regression of past data.
- **Collaborative Whiteboard - Node.js/Socket.io** A real time collaborative whiteboard. Brush strokes of individual users are transmitted from client to server via socket.io causing all users to receive an update to their whiteboard.
- **IsoRender - Javascript/Bootstrap** A 3D object editor and rendering system for isometric figures. Allows the user to perform rotations along all axis and provides saving functionality by encoding shape data in character strings.
- **PytchControl - Python** Uses PyAudio to detect patterns in changing pitch, allowing users to interface with their computer via whistling or humming a series of notes.

## Experience

**Founder/Instructor** **Hatch** **May 2017 - August 2017**

- Developed a Python based web interface for the Industrial Internet of Things
- Built multithreaded Linux daemons to control data collection, OLE for Process Control (OPC), and Websockets

**Founder/Instructor** **AP Comp Sci With Wy** **January 2016 - June 2016**

- Built an unofficial online course where students could learn the AP Computer Science curriculum.
- Taught a class of 26 students, developed 10 units of content and provided one-on-one assistance.

**Vision Code Specialist/Mentor** **FIRST Robotics** **January 2016 - April 2016**

- Worked in a group environment to develop vision code in C++ through the use of OpenCV.
- Mentored first years robotics members, teaching them the essentials of programming and giving them a place in the development cycle.

## Awards

- **Hatch Scholarship,** awarded for academic achievement, community contribution and leadership experience.
- **Third Place** in McMaster ICPC Qualifiers Programming Competition.
- **Certificate of Distinction,** ranked within the top twenty-five percent of contestants in the Euclid Contest.

## Languages and Technologies

■ Python ■ C++ ■ Java ■ JavaScript
■OpenCV ■ sklearn (scikit-learn) ■ Flask ■Node.js ■Socket.io ■Materializecss ■Linux