Wyatt Wismer

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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

- **Guitar String Simulation - Java** Simulates a string instrument through the use of the Karplus-Strong algorithm.
- **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 websocket 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 2** 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	**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.

Competitive Gymnastics Coach	**Gymtastics**	**September 2015 - June 2016**

- Taught gymnastics at a competitive level, supporting students as they developed both in their gymnastics ability and as members of a team.

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 2 ■ C++ ■ Java ■ JavaScript
■ sklearn (scikit-learn) ■Node.js ■Socket.io ■Bootstrap ■OpenCV ■Linux