Wyatt Wismer

Education

McMaster University Hamilton, Ontario August 2016 - Present

Bachelor of Software Engineering Expected Graduation: June 2021

- Maintained a 4.0 GPA
- **President of McMaster Competitive Programming,** McMaster University's community for algorithmic problem solving and the International Collegiate Programming Contest.

Experience

Software Engineering Intern

Microsoft

June 2019 - Present

- Worked on the Azure SQL Data Warehouse team.
- Enabled users to embed external scripts into their SQL DW queries, supporting languages such as Python and R.
- Parallelized execution of external scripts based on user provided parameters and the underlying input query.

Software Engineer - PEY Intern

Intel

August 2018 - May 2019

- Designed an API to allow other teams to model the effect of parasitic data on wire delays.
- Optimized a 26 year old subsystem reducing runtime and solving long standing memory issues.
- Created tooling to assist with tracking code coverage, replacing macros and automating code analysis.

Software Engineering Intern

Microsoft

May 2018 - July 2018

- Worked on the Azure Data Factory team.
- Designed a filter to validate incoming api requests against an OpenAPI specification.
- Used the above filter to find inconsistencies between the latest specification and existing tests.

Projects

- **WFMT Python/OpenCV** 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%.
- **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.

Awards

1st Place, awarded for performance in the 2018 McMaster Programming Competition. **Gold Medal**, obtained for scoring within the top 4% of participants in the HackerRank 101 Hack competition. **Hatch Scholarship**, awarded for academic achievement, community contribution and leadership experience. **Provost Honour Roll**, for outstanding performance with a 12.0 GPA on at least 30 units.

Languages and Technologies

■ Python ■ C++ ■ C# ■ JavaScript

■ LLVM ■ ASAN ■ OpenCV ■ sklearn (scikit-learn) ■ Flask ■ Node.js ■ Socket.io ■ Materializecss