David A. Wing   wing.49@osu.edu   (614)327-6763   github.com/hyperwing

Education
The Ohio State University
B.S., Computer Science and Engineering, Honors and Scholars   expected July 2020

Honors
Morril Excellence Scholarship   2015-2020
Engineering Dean's Scholarship   2015

Qualifications

Java	SQL Server	RHEL
Python	AWS(S3, Lambda, Glue)	Raspian
JavaScript	Android Development Studio	AngularJS
C#	Node.js	Powershell
C++	Mocha	VB.NET

Work Experience
Capital One, McLean, VA   5/19-8/19
Technology Internship Program - ATM Division
Reverse Engineered USB Drivers for ATMs and wrote custom USB drivers. Created a script to run API calls from XFS-CEN API. Collected USB packets using the script from the ATM with Wireshark. Reverse engineered the USB signals to be able to run arbitrary code on the ATM and create custom drivers in Python. Wrote an automation testing framework for testing of all ATM hardware.

Asurion, Nashville, TN   5/18-7/18
Software Engineering Intern - Sub-billing Division
Worked with back office transactions, streamlining account processing by creating internal tools in Node.js and Python. Created transaction records and histories for accounts by combining and inferring existing data. Wrote a unit test suite in Mocha for all of my tools and resolved critical issues in existing AWS applications. Led a team presenting a technical business case on new LOBs to executives at Asurion.

Innovative Systems, Pittsburgh, PA   5/17-8/17
Software Engineering Intern - R&D Division
Created tools used in the daily deployment of database updates and migrations. Converted several stored procedures into a more extensible format. Used industry software design practices and documentation. Envisioned and developed a cohesive product that is currently in production use. Using VB.NET and Java, the product took user instructions and ran through a complex procedure to transfer data used in daily deployment.

The Ohio State University, Columbus, OH   4/16-11/16
Student Information Technology Worker- Chemistry Department
Created scripts in Powershell and Python deployed for use for software automation across the department. System Admin for RHEL and Raspian for hardware and software deployment.

Software Projects
Inter-collegiate Programming Competition - ACM   2016-2019
Competed in an algorithmic programming competition for college students. Represented Ohio State in the East Central Conference Event and placed in top half of participants.

OHI/O Hackathon   2015-2019
Created an Angular application that acts as a driving companion app for cars that tracks fuel efficiency and other metrics pulling from internal device components for a Honda challenge. Application successfully built for cross platform usage, and derives statistics from kernel level calls.

FIRST Robotics Team - Programming Division
Worked as the lead programmer on the varsity robotics team. The team advanced to the highest stage of the competition, and performed in the top half of the participants.

Unity3D Game Development
Developed several Unity3D games for Android, Windows and Web Browsers. One game was a platform side scroller, featuring unlimited tile generation and score keeping along with various powerups, each influencing the run of play. Ended with limited release on the title.

Android Development
Developed several native Android applications as proof of concept ideas, or as learning tools. Applications created for hackathons and personal usage to solve common inconveniences.