

Michael Joyce

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Education

University of Missouri	Columbia, MO
B.S Degree in Computer Science with a certificate in Cyber Security.	Expected May, 2023
Parkway West High School	Chesterfield, MO
High School Diploma	Graduated May, 2019

Work Experience

University of Missouri – Industrial and Manufacturing Systems Engineering	Columbia, MO
Undergraduate Research Assistant	May, 2022 – August, 2022

- Setup testbeds for drone delivery planning
- Simulated planned drone delivery missions using Unreal Engine, AirSim, and PX4
- Developed Python scripts to carry out drone flight simulations
- Created a web application to facilitate monetization for drone delivery planning
- Attended Mizzou Summer Research Forum
- Attended periodic meetings with research team

University of Missouri – IT Division	Columbia, MO
Accessibility Testing Assistant	June, 2021 – January, 2022

- Performed accessibility testing on websites and apps to identify accessibility issues
- Documented the accessibility issues identified during accessibility testing thoroughly
- Attended weekly meetings with accessibility team

Amazon Fulfillment Center	St. Peters, MO
Stower	June, 2020 – August, 2020

- Stocked shelves in an extremely fast-paced environment
- Use smartphone, apps and scanners to sort, scan, and prepare products for delivery
- Worked 12-hour long shifts

University of Missouri	Columbia, MO
Machine Shop Assistant	August, 2019 – March, 2020

- Cleaned the machine shop
- Operated drills and saws when necessary
- Helped renovate rooms in Lafferre Hall
- Helped the machine operators with anything they requested

Activities

Mizzou Summer Research Forum	Columbia, MO
Undergraduate Researcher	July 28 th , 2022

- Title: A Simulator Framework for Evaluating Parcel Delivery Route Plan of Collaborative Truck-Drone System
- Mentor: Sharan Srinivas
- Collaborated with Sharan Srinivas to create an abstract and poster that demonstrated the research done throughout the fellowship
- Presented the resulting poster at the summer research forum poster session

Cyber Tigers

Member

Columbia, MO

August 2020 – Present

- Participated in discussion about cyber security principles

Parkway Spark!

Software Engineer

St. Louis, MO

August 2018 – May 2019

- Developed a web app for digital logging of care schedule for animals at the St. Louis Zoo
- Developed a website in HTML and CSS for our underwater headphone prototype
- Developed a wave-based video game in Gamemaker Studio using the Gamemaker language
- Developed a platformer video game in Gamemaker Studio using the Gamemaker language

GlobalHack VII

Hackathon

St. Louis, MO

October 12th–14th, 2018

- Developed the backend of a social media webapp to connect immigrants with each other in the United States using Python and Django (the frontend had JavaScript/React with Bootstrap)

Other Projects

CryptoWatch

Object Oriented Programming

- Developed a desktop application that tracks the top 100 crypto currency prices
- Utilized object-oriented design with Java and integrated API calls from CoinGecko
- Incorporated user authentication and saved state of the application to enhance user experience

MizzouTKE

Web Development

- Built a full stack web application for my fraternity, Tau Kappa Epsilon
- Used HTML, CSS, and JavaScript for the frontend of the application
- Integrated user authentication with AJAX by sending requests to the Apache server which enabled the dues payment processing feature

Linux Hardening

Unix Operating Systems

- Researched and developed a security protocol for UNIX based operating systems, specifically RHEL and MacOS, to strengthen their defenses against cyber attacks
- Built strong fundamentals for the completion of the cyber security certificate

Technical Skills

Programming Languages:

- Most used: Python, C, JavaScript, HTML & CSS
- Familiar with: Java, PHP, Swift, Assembly (Motorola)

Tools: Visual Studio Code, Xcode, Vim, NetBeans, Java FX Scene Builder, Bootstrap, jQuery, Git, EC2 instances, Microsoft Office Suite, and Google Suite

OS: Mac OS, Windows, and Linux (Mint, RHEL, and Kali)