

# Yusen Peng

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## EDUCATION

The Ohio State University, Columbus, Ohio

Honors B.S. Computer Science and Engineering, May 2026

Overall GPA (4.00 scale): **4.00**

## SKILLS

Coding Languages: Advanced in Java, Python; Familiar with JavaScript, HTML, CSS, C++, R, Power Fx, MATLAB

Libraries/Frameworks: ReactJS, Pandas, NumPy, Matplotlib, Tkinter, Android, Swing, JUnit

Operating Systems/Software: Linux/UNIX, VS Code, Android Studio, Jupyter, Eclipse, Power Apps/Automate, GitHub

## WORK EXPERIENCE

The Ohio State University, Columbus, Ohio

**Research Assistant**, May 2023 – Present; part-time

*Undergraduate summer research advised by Dr. Suren Byna*

<https://github.com/Yusen-Peng/File-Format-Testing>

- Tested file I/O performance using large-scale data on Berkeley Lawrence National Lab remote server
- Investigated the effect of Blosc compression on file I/O performance for HDF5, netCDF4, and Zarr
- Compared CSV file read/write performance with HDF5, netCDF4, and Zarr
- Worked with SSH and UNIX; applied various Python libraries: Pandas, NumPy, Matplotlib

The Ohio State University, Columbus, Ohio

**Lab Assistant**, May 2023 – Present; part-time

- Designed, developed, and tested a mobile application for engineering students to purchase machine parts online
- Implemented the automation across multiple software: Power Apps, SharePoint, Excel, and Outlook
- Coded in Power Fx to develop the mobile application; Utilized Power Automate to implement automation

## SOFTWARE PROJECTS

**Resume Generator**, June 2023 – July 2023

<https://github.com/Yusen-Peng/Resume-Generator>

*Front-end Development Individual Project*

- Developed a ReactJS application that generates a resume for the user within the website browser
- Implemented the following feature: adding dynamic number of entries into the different sections of the resume
- Coded in JavaScript, JSX, and CSS; Utilized ReactJS framework, useState hook and functional components

**Career Consultant**, May 2023

<https://github.com/Yusen-Peng/Career-Consultant>

*Front-end Development Individual Project*

- Developed a ReactJS application that helps students choose their career path by asking a number of questions
- Evaluated career path by the following dimensions: academic performance, family background, and extroversion
- Coded in JSX, CSS, JavaScript; utilized ReactJS framework, useState hook and map data structure

**Final Grade Calculator**, April 2023

<https://github.com/Yusen-Peng/Final-Grade-Calc>

*Mobile Development Individual Project*

- Developed an Android app that calculates the minimum final score needed to achieve a certain grade for a course
- Coded in Java with Android Studio Software; Utilized XML to design and build User Interface

**Attorney Service Explorer**, April, 2023

<https://github.com/Yusen-Peng/Attorney-Service-Explorer>

*Attorney Data Analysis Challenge at DataFest 2023*

- Developed a data analysis project that explores 8 datasets about attorney service across the U.S. at DataFest 2023
- Utilized R programming, statistical analysis, and data visualization

**Optimal Route**, October 2022

<https://github.com/Yusen-Peng/Optimal-Route>

*Honda Universal Basic Mobility Challenge at Hack OHI/O 2022 Hackathon; Mobile Development Individual Project*

- Developed an Android application that simulates the optimal route for students to visit multiple places on campus
- Implemented a graph searching technique: Dijkstra's algorithm; Applied Object-Oriented Programming
- Coded in Java with Android Studio Software; Utilized XML to design and build User Interface