

# Yusen Peng

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## EDUCATION

The Ohio State University, Columbus, Ohio

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

Honors B.S. Computer Science and Engineering with AI specialization, May 2026

## TECHNICAL SKILLS

Front-end: HTML/CSS, JavaScript; React/React Native

Back-end: Node.js, Python, Java; Express

Database: MongoDB

DA/AI/ML frameworks: scikit-learn, pandas, numpy, matplotlib/seaborn, statsmodels

## INDUSTRY EXPERIENCE

National STEM Honor Society, Gloucester, Massachusetts (remote)

**Web and Tech Intern (Web Application)**, May 2024 – Present; part-time

- Collaborate in developing, improving, testing, and maintaining the National STEM official website
- Write **HTML and custom CSS/JS** snippets within WordPress to create responsive web pages and fix bugs
- Attend both weekly tech department meetings and website redesign team meetings to report updates

Resilience, Inc, Tampa, Florida (remote)

**Frontend Developer (Mobile Application)**, December 2023 – Present; part-time

- Collaborate in developing, testing a mobile app called AIMME with many tools to learn emotional intelligence
- Contribute over 60+ hours to accomplish 30+ tasks of implementing new features and fixing bugs
- Utilize **React Native** and multiple react hooks for frontend development: useState, useEffect, useRef, etc.
- Utilize **Git** for version control; Attend both weekly team meetings and team lead/manager one-on-one meetings

## RESEARCH EXPERIENCE

The DATUM Lab @ The Ohio State University, Columbus, Ohio

**Research Assistant (Machine Learning)**, January 2024 – Present; Advisor: Dr. John Paparrizos Mentor: Ryan DeMilt

- Collaborate in implementing, documenting, and testing a time series classification library called SIGNAL
- Read research papers extensively and make google slides for a total of 5+ time series classification algorithms
- Adapt the corresponding **sklearn/PyTorch** source code carefully and analyze it modularly for each classifier
- Utilize **Git** for version control; Attend weekly team meetings and office hours to report updates and fix bugs

The Ohio State University, Columbus, Ohio

**Research Assistant (Data Analytics)**, September 2023 – April 2024; Advisor: Dr. Kelsea Best

- Analyzed natural disaster and public housing datasets from exploratory, correlation, and regression perspectives
- Integrated Python with **pandas, matplotlib, seaborn, statsmodels** to generate a total of 40+ figures
- Utilized **Git** for version control; Attend weekly Zoom meetings to report updates and contribute new ideas
- Contributed as **a co-author of a conference publication**: “Assessing the equity implications of flood risk to public housing across the United States” at 2024 The Society for Risk Analysis Annual Meeting

The Ohio State University, Columbus, Ohio

**Research Assistant (Computer System)**, May 2023 – August 2023; Advisor: Dr. Suren Byna

- Developed benchmarks to compare file I/O performance with CSV, HDF5, netCDF4, and Zarr
- Processed and visualized timing data with csv files and plots using Python, **pandas, numPy, matplotlib**
- Designed 20+ test cases on Linux and accomplished a research paper in LaTeX of 13 pages with 35+ figures
- Presented research posters at two annual research forums at The Ohio State University: 2024 Undergraduate Research Forum for Engineering and Architecture and 2024 CSE Graduate Student Visit Day

## SOFTWARE PROJECTS

**Application Tracker** | Node.js, Express.js, JavaScript, MongoDB [https://github.com/Yusen-Peng/Application\\_Tracker](https://github.com/Yusen-Peng/Application_Tracker)

- Developed a full-stack web application to keep track of job applications with job titles, company, status, date, etc.

**Weather App** | React Native, JavaScript, OpenWeather API

[https://github.com/Yusen-Peng/Weather\\_App](https://github.com/Yusen-Peng/Weather_App)

- Developed a mobile application to fetch and show real-time user's geolocation and weather condition information