

Yu (Fisher) Sun

f.sun@wustl.edu

github.com/seasonedfish

fishersun.com

Education

Washington University in St. Louis – B.S. Computer Science, GPA 3.95

Expected May 2025

Experience

Research Assistant (Software), Washington University in St. Louis – St. Louis, MO

June 2023 – Sept 2023

- Introduced major update to established Python codebase by applying polymorphism, enabling researchers to perform StartReact experiments with 3 different kinds of sensors
- Engaged in tight feedback loop with researchers, leading to user experience that maximized their productivity

Research Assistant (Software), UMass Lowell – Remote

May 2022 – July 2022

- Developed software to download thousands of SEC S-1 documents in parallel using Futures and extract relevant information using BeautifulSoup, resulting in rapid and reproducible data acquisition
- Created highly optimized, parallel Python code using Polars to calculate variables measuring patent innovation, allowing full use of dataset of over 100 million entries

Research Assistant (Software), UMass Chan Medical School – Remote

July 2020 – Sept 2020

- Developed Python module to standardize information from several electronic health record dataset formats using vectorized Pandas functions, providing data for deep learning-based stroke etiology classification system
- Implemented integration testing with Pytest and established continuous integration (CI) with GitHub Actions, ensuring correctness of data processing across updates

Project Contributor, Energize Andover – Andover, MA

July 2019 – Oct 2021

- Created client for town energy API with full test coverage and documentation using Requests, Pytest, Coveralls, Sphinx, and Read The Docs, providing developers easy access to energy use readings for town buildings
- Developed Alexa app with Flask and AWS Lambda allowing users to access real-time temperature information for Andover High School, enhancing the convenience and accessibility of temperature data

Projects

Beatbuff – TypeScript, Next.js, React, Prisma, MySQL, Knock, Chakra UI, Tailwind CSS, Oracle Cloud Infrastructure

- Collaborated within three-member team to develop web app for sharing music reviews using TypeScript and Next.js
- Implemented database and JSON data API with MySQL and Prisma, allowing for efficient data management
- Created React components with Chakra UI and Tailwind CSS to create user-friendly interfaces
- Practiced Agile development by continually seeking user feedback and iteratively improving features through sprints

Voting App – Go, Chi, MongoDB Atlas, MongoDB Go Driver

github.com/seasonedfish/suelections

- Built web app in which users can read about and vote for Student Union candidates
- Developed JSON data API and routing logic using Go and Chi, resulting in fast server performance
- Deployed database on MongoDB Atlas, wrote backend that updates it using MongoDB Go Driver
- Implemented MVC design pattern with distinct model and controller components, simplifying code organization

CMake Independent Study – C++, CMake, Google Test, GitHub Pages

- Modernized the WashU Object-Oriented Software with CMake, allowing for cross-platform C++ development
- Configured CMakeLists.txt files with best practices and refactored unit tests, ensuring long-term maintainability

Personal Website – Astro, TypeScript, Tailwind, Cloudflare Pages, Lighthouse

fishersun.com

- Built and deployed static site for personal coding reflections using Astro, TypeScript, and Cloudflare Pages
- Created custom theme using Astro components and Tailwind, achieved Lighthouse Performance score of 100%

Skills

Languages: Python, Go, Java, HTML, CSS, C++, Rust, JavaScript, TypeScript, SQL, Haskell

Technologies: Linux, Git, JUnit, Pytest, GitHub Actions, Maven, Poetry, Nix, AWS EC2, AWS Lambda, Cloudflare DNS

Activities

Developer Student Club WashU – Technical Lead

dscwashu.com

- Directed weekly events to establish community among 100+ members, provided guidance for software projects