

Sabrina Xue

Lincolnshire, IL 60069, (630)-335-2314, sabrinx@umich.edu

EDUCATION

University of Michigan - Ann Arbor

Bachelor of Science in Computer Science

GPA: 3.54/4.0

Coursework: Data Structures & Algorithms, Programming & Data Structures, Foundations of Computer Science, Human-Centered Software, Intro to Artificial Intelligence, Intro to Computer Organization, Discrete Math

Leadership: Director of Web Dev - Kappa Theta Pi technology fraternity, Web Dev Executive Board - Michigan Snowboarding Club

Ann Arbor, MI

August 2022 - April 2025

EXPERIENCE

AMOpportunities

Chicago, IL

Software Engineering Intern

May 2023 - August 2023

- Assisted with design, implementation, and maintenance of CI/CD pipelines for cloud-based apps
- Utilized GitHub Actions to migrate 30+ code repositories from Gitlab to Github
- Refactored pipelines and workflows to deploy code to AWS using DataDog and AWS CloudWatch to alert cloud-based applications

Kappa Theta Pi (KTP) Pre-Professional Technology Fraternity

Ann Arbor, MI

Director of Website Development

April 2023 - Current

- Developed and maintained KTP website (<https://ktpmichigan.com/>) visited by over 100 members with CSS, HTML, and Figma
- Led weekly committee meetings to mentor over 30 members in creating personal websites and add features to existing portfolios
- Updated the website with important changes to the club, specifically renovating the executive board and members page

PROJECTS

Machine Learning Project

- Used natural language processing, machine learning, and supervised learning models to automatically identify subjects of media posts
- Gained experience with recursion, function objects, binary trees, templates, comparators, and map data structure
- Leveraged Container Abstract Data Types, Dynamic Memory, The Big Three, Linked Lists, and Iterators

Dynamizing and Streamlining Repos

- Operated serverless framework and Boto3 module to automate secrets per region with lambda functions
- Integrated Slack into repos by creating changelogs applying to multiple pull requests to a single deployment
- Utilized AWS-CLI to dynamically build a new staging environment by automatically generating ports, listeners, and secrets

Bank Wire Transfer

- Simulated a real-time gross settlement system by reading in and analyzing a set of customers, transactions, and various queries
- Evaluated runtime and storage tradeoffs for storing and accessing data contained in multiple data structures
- Implemented unordered maps, unordered sets, input redirection, structs, functors, error streams, and conversions

Computer Vision Project

- Coded an image resizing program using a seam-carving algorithm with C++ in Visual Studio Code
- Extracted data from data streams to find and remove image "seams" passing through the least essential pixels
- Grew skills in testing, debugging, pointers, arrays, structs, strings, streams, IO, and abstract data types in C

Personal Website

- Designed and coded personal website from scratch using Figma, Canva, HTML, CSS, and Javascript
- Publicized website on a personal domain with fully functional dynamic sections and animated buttons (<https://sabrinxue.com/>)
- Configured spreadsheets to store data inputted into the website with contact info and content (<http://tinyurl.com/bd375z36>)

PROFICIENCIES

- **Languages:** C++, HTML, CSS, Python, Shell script, YAML
- **Cloud platforms/DevOps/Operating systems:** AWS, Github, Gitlab, Linux, Windows, MacOS
- **Application monitoring/Issue management/Engineering tools:** JIRA, DataDog, AutoCAD, Inventor, Arduino