

# Yixin Xiao

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<https://yixinxiao7.github.io/site/#/>

## EDUCATION

### University of Michigan, Ann Arbor

- Major: Computer Science Engineering Expected Graduation: May 2021
- College of Engineering GPA: 3.83 / 4.00
- **Relevant Coursework:** Data Structures and Algorithms, Web Systems, Operating Systems, Computer Security, Computer Organization, Matrix Algebra, Discrete Mathematics

## WORK EXPERIENCE

### Capital One

Richmond, VA (Remote)

#### Software Engineering Intern

June 2020 - August 2020

- Developed full stack business-facing app in agile environment to enhance business intelligence and automate fraud compliance
- Created RESTful API which interacts with external and internal services, enabling users to create and track JIRA issues
- Leveraged Angular to build a UI which allows users to easily interact with API and view filterable dashboard of fraud-related tasks
- Implemented multithreading and caching to improve issue retrieval runtime by up to 91%
- Protected project and user credentials/secrets by integrating HashiCorp Vault/Key Management System

### Applied Research Associates

Alexandria, VA

#### Scientific Programming Software Engineering Intern

May 2019 - August 2019

- Merged two separate code databases based on a simulation program with over 100,000 LOC and 25 years of development
- Constructed a Dynamic-Link Library (DLL), allowing multiple driver programs to use specific simulation components and functions
- Developed API for the DLL, granting users ability to run simulations with unique parameters and manipulate output data
- Built functionality of existing GUI for the simulation program into the DLL to maintain and integrate GUI functionalities
- Enhanced user flexibility for data management after revamping the I/O system by transferring data to memory

### Crowds and Machines Lab

Ann Arbor, MI

#### Undergraduate Research Assistant

September 2018 - February 2020

- Researched the use of active learning (AL) to create a machine learning model that interchanges active learning frameworks
- Developed a flexible Convolutional Neural Network wrapper class to easily switch active learning frameworks and test hypothesis
- Implemented text dataset loaders, expanding the experimental pipeline to evaluate performance of AL strategies on text data
- Configured wrapper class to work on both CPU and GPU (CUDA), boosting the speed and efficiency of testing

### Posterity Group, LLC

Derwood, MD

#### Project Management / IT Intern

June 2018 - August 2018

- Applied Poka Yoke and other Six Sigma concepts, mixed with meetings with CEO and COO, to improve the business hiring process
- Leveraged JavaScript to automate internal interdepartmental documents to promote QA and expedite office workflows
- Used Microsoft Flow to automate business workflows that achieved more efficient work cycles between PM and HR departments

### University of Michigan

Ann Arbor, MI

#### Undergraduate Research Assistant

September 2017 - April 2018

- Utilized Apple's Augmented Reality kit to develop an AR iOS application, effectively building the foundation for future research
- Tested the Arduino's capability in enabling a previously non-existing Bluetooth functionality in daily machinery

## LEADERSHIP/EXTRACURRICULAR

### Michigan Hackers

#### Web Development Core Member

September 2018 - Present

- Leverage React to develop interactive and user-friendly review pages, completing the main frontend component of the web app
- Utilize Bootstrap to create stylized components, increasing user-engagement
- Developed a full-stack architecture through brainstorming and communication with both frontend and backend teams

### Tau Beta Pi (Engineering Honor Society)

#### Professional Development Chair

January 2019 – September 2019

- Created networking event involving icebreakers and post-event activities, increasing new member retention
- Set up the foundations for new cover letter workshop, including its structure and resources to contact

#### DEI Core Committee Member

January 2020 – Present

- Conduct monthly book club to increase community awareness of DEI and promote open discussion on enhancing DEI at TBP
- Facilitate weekly meetings to dissect the current state of DEI at TBP and debrief progress reports

## SKILLS & ABILITIES

### Related Framework and Languages

- C++, Python, Java (Spring Boot), JavaScript (React, Angular, Bootstrap), SQL, HTML/CSS, Fortran, MATLAB, Linux, Git, Excel

### Languages

- **Chinese** – Native, **Spanish** – 5 Years/ Conversational