

# Zihan Zhao

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## EDUCATION

<b>Northeastern University</b> , San Jose, CA	Expected December 2023
<i>Master of Science, Major in Information Systems</i>	GPA: 4.0/4.0
Relevant Coursework: Data Structures & Algorithms, Java OOPs, Web Frontend & Backend Development	
<b>University of Illinois at Urbana-Champaign</b> , Champaign, IL	August 2016 - May 2020
<i>Bachelor of Arts, Major in Economics</i>	Dean's List 2019 - 2020

## SKILLS

**Languages:** JavaScript, Java, Python, HTML, CSS, Shell, Markdown

**Tools:** VS Code, IntelliJ IDEA, Eclipse, Jupyter Notebook, Git, GitHub, Node.js, Express.js

## PROJECTS & RESEARCH

**Bookshelf** (Personal) | [GitHub](#) | [Website](#) October 2022

- Built concise **JavaScript** application for looking up books online with bookmark function and **dark mode**
- Utilized the **Google Books API** to allow users to search books based on various keyword types and return informative book cards for users to browse
- Incorporated the Model-View-Controller (**MVC**) design pattern and **OOP** class design to achieve an organized, robust, and easy-to-maintain code structure

**Clear To-Do List App HTML Clone** (Personal) | [GitHub](#) | [Website](#) September - October 2022

- Replicated the iOS to-do list app Clear using **JavaScript** that features interesting interactions on mobile devices based on framework Vue's creator Evan You's archived project
- Implemented 8 gesture controls that allow users to simply use gestures to manage to-do events including swipe to complete/delete, tap to edit, pull down to create, long pull down to go back and forth between lists
- Incorporated **ES6** syntax and best practices of **OOPs** concepts in the design and structure to reduce code complexity and improve readability which resulted in a 50% reduction in total lines of code from 5k to 2.5k

**Sorting Algorithm Visualizer** (Personal) | [GitHub](#) | [Website](#) August 2022

- Built interactive and user-friendly **Vanilla JavaScript** application for visualizing sorting algorithms
- Implemented Bubble Sort, Selection Sort, Insertion Sort, Merge Sort, Quick Sort, and Heap Sort
- Developed complexity table, colored indicators, and code traces features to display more clear-cut views on the algorithm functionality

**Image Management Tool** (Academic) | [GitHub](#) April 2022

- Built image processing application in **Java** with **GUI** that features metadata extraction and format conversion
- Utilized JavaXT and metadata extractor package for backend image information extraction and format conversion and JavaFX package for GUI development

**San Francisco Crime & Apartment Rental Analysis** (Academic) | [Report](#) October - November 2021

- Analyzed the correlation between San Francisco crime and rental data for rental recommendations in **Python** with two team members
- Cleaned, regrouped, and plotted crime data with 500k+ entries using **NumPy** and **Pandas**
- Visualized and ranked data with various visualization styles (e.g., bar and line chart, heatmap) using **Matplotlib**

## WORK EXPERIENCE

**Bank of Communications**, Xi'an, China June 2019 - August 2019  
*Businesses Loan Department Intern*

- Reviewed and inspected business revenues and debt levels for over 200M Yuan loan approval processes
- Resolved ad-hoc requests including managing complaints, allocating deposits, and tracking bank's key KPIs

**China Vigor Drilling Oil Tools and Equipment Co., Ltd.** Xi'an, China June 2017 - August 2017  
*Manager Assistant Intern*

- Communicated and managed two social media platforms to share ads and updates to acquired customers
- Coordinated local and global employees to plan schedules, accommodate visitors, and translate documents