# Zihan Zhao

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#### **EDUCATION**

# Northeastern University, San Jose, CA

Expected December 2023

Master of Science, Major in Information Systems

GPA: 4.0/4.0

Relevant Coursework: Data Structures & Algorithms, Java OOPs, Web Frontend & Backend Development

### University of Illinois at Urbana-Champaign, Champaign, IL

August 2016 - May 2020

Bachelor of Arts, Major in Economics

Dean's List 2019 - 2020

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

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

### **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 selections of keyword types and to generate informative book cards for users to browse
- Incorporated the Model-View-Controller (MVC) design pattern and OOPs 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 such as swipe to complete/delete event, tap to edit content, and long pull down to switch between lists
- Incorporated ES6 syntax and best practices of OOP concepts in the design of structures to improve readability and reduce code complexity followed by a 50% reduction in total lines of code from 5k to 2.5k lines

# 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 break down each sorting logic and highlight differences between them

### 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 making 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