# Miaoqiu Sun

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#### **EDUCATION**

# University of California, San Diego

Expected June 2023

Bachelor & Master of Science in Computer Science (5-year combined BS/MS Program)

- Cumulative GPA: 3.52/4.00, Major GPA: 3.90/4.00 | Provost Honors Award earned in 2020 & 2021
- Relevant course: Data Structure & OO Design, Computer Architecture, Software Engineering, Operating System, Algorithms and Systems Analysis, Database Principles

# **EXPERIENCE**

Hellobike, Inc 06/2021 - 09/2021

Software Engineer Intern

Shanghai, China

- Monitored and updated real-time passenger order data in backstage through Java, Elasticsearch, and Kafka, writing selected
  information into an organized search platform for quicker tracking that led to a 40% increase in productivity
- Solved problems such as data synchronization delay, data access optimization, and historical data refreshing via embedding debugging tools (HLog) and writing common configurations, helped reduce the labor force by 10 people per week
- Developed new features and completed maintenance on existing programs for the HelloTravel IOS app using **SpringBoot** and **Maven**, prioritized and resolved 25+ new features and bug fixes

sMedio, Inc 08/2020 - 10/2020

Software Engineer Intern

Shanghai, China

- Packaged the original app which is in use by 7000+ global users into framework and embed into a new project, providing external interfaces without exposing implementation, resolved the inability to load the storyboard and to play audio after embedding
- Designed and implemented 10+ new functions to optimize UI using **Objective-C**, including creating a floating button to switch interfaces directly, reordering storyboards, and rebuilding the initial interface, etc
- Passed unit testing with 100% coverage, improved the compile speed 20x faster, getting the client's approval

Sander Lab at UCSD 03/2020 - 06/2020

Lab Assistant

San Diego, CA

• Facilitated in a diabetes research project, analyzed thousands of data through **single-cell sequencing**, used **Python** for data visualization in **Unix**; identified a gene regulation program that might cause human β-cell dysfunction

# **PROJECTS**

## Potato Timer

- Collaborated with a team to build and improve a Pomodoro website using HTML, CSS and JavaScript
- Managed and developed both front-end design and back-end technical application, created 3 modes (dark, light, animation mode) with sound implementation and 4 different languages to increase the user experience, reproduced the Pomodoro principle
- Reached 99.52% coverage using unit testing, won second place and the "Most Creative Website" Award in the final report and presentation among 300 other students

#### Thread & Multiprogramming Implementation

- Employed **Nachos** to write **Java** files to keep the code working normally after enabling the interrupt mode, and improved efficiency to 1.2x higher compared to provided reference solution
- Managed address space by implementing system calls such as open/close, read/write, exec/join/exit, and loaded the program into virtual memory for user-level programs to invoke Nachos routines

#### Adopt Sea Lions - Online Fundraising

- Implemented basic front-end functions such as order display, status change, and adding and removing items
- Learned and tried to complete back-end services, such as using MySQL, PHP to manage databases and pages

#### **SKILLS**

- Java, C/C++, Python, Objective-C, JavaScript, CSS, HTML, VIM commands, Linux, Git/GitHub
- Nachos, SQL (SQLite3, MySQL), Assembly, MATLAB
- Microsoft Office (Excel, Word, PowerPoint)