

Miaoqiu Sun

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Education

09/2018-Present

University of California, San Diego

MS Graduation Date: June 2023

Bachelor/Master of Science in Computer Science, Cumulative GPA: 3.52/4.00, Major GPA: 3.93/4.00

(5-year combined BS/MS Program)

- **Related Courses:** Data Structure & OO Design, Computer Architecture, Software Engineering, Operating System, Algorithms and Systems Analysis, Database Principles, Probability & Statistics, Discrete Math
- **Provost Honors:** Earned in Spring Quarter 2020 & Winter Quarter 2021

Experience

06/2021-09/2021

Software Engineer Intern

Hellobike, Inc.

Shanghai, China

Kunlun Platform Development

Played a major role in a project that built a new platform for local government to easily access their city's real-time transportation data that helped reduce the labor force by 10 people per week

- Utilized Java, Elasticsearch, and Kafka to monitor and update real-time passenger order data in backstage, writing selected information into an organized search platform for quicker tracking
- Solved problems such as data synchronization delay, data access optimization, and historical data refreshing via methods like embedding debugging tools (HLog) and writing common configurations
- Developed new features and completed maintenance on existing programs for the HelloTravel IOS app to improve their performance
- Developed Python scripts for 5x faster data pushing to the Transport Department

08/2020-10/2020

Software Engineer Intern

sMedio, Inc.

Shanghai, China

Remodeling of DTCP-Player app

Accomplished an important part of a project that rebuilt the old app, optimized UI, and improved the compile speed around 20 times less than the original, getting the client's approval

- Packaged the original app into framework and embed into the new project, providing external interfaces without exposing the implementation
- Solved problems such as the inability to load the storyboard and the inability to play audio after embedding during the packaging process
- Independently designed to implement 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

03/2020-06/2020

Lab Assistant

Sander Lab at UCSD

San Diego, CA

Gene Regulatory Program Causing β -cell dysfunction

- Participated in a diabetes research project, analyzed and sorted thousands of data through single-cell sequencing, used Python to visualize the data in a Unix system, and identified a gene regulation program that might cause human β -cell dysfunction

Projects

01/2021-03/2021

Potato Timer

A timer website to help improve efficiency. It supervises the study and work by setting a specific focus time. After every four working phases, it automatically enters a rest period.

- Collaborated with a team to build and improve a pomodoro website using HTML, CSS and JavaScript
- Responsible for both front-end design and back-end technical application, created a variety of modes (dark, light, animation mode) with sound implementation and multiple 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

04/2021-06/2021

Thread & Multiprogramming Implementation

Reproduced the thread system to solve multiple synchronization problems; implement system calls and support multiple programs.

- Used nachos to write java files, so that when KThread.yield is called and interrupt is enabled, the code still runs normally
- Managed address space by implementing system calls such as creat, open/close, read/write, exec/join/exit, and loaded the program into virtual memory, so that user-level programs can invoke Nachos routines implemented in the Nachos kernel

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)

