

# Liuhao Wu

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## EDUCATION

### University of Chicago (UChicago)

- B.S. in Computer Science; **GPA: 3.788**

Sep 2021 — Jun 2023

Chicago, IL

### University of California, Santa Barbara (UCSB)

- Computer Science with Honors (*transferred out*); **GPA: 4.000**

Aug 2019 — Aug 2021

Santa Barbara, CA

## EXPERIENCE

### RedMane Technology LLC

Nov 2023 — Present

*Software Developer*

Chicago, IL

- Collaborated in designing, developing, and testing a customized Client Relationship Management solution for the New Mexico Children, Youth, and Families Department to digitize child welfare casework management process
- Analyzed solution architecture, created business object models, and translated 700+ high-level business requirements into detailed technical tasks, validating contract requirements and estimating development efforts
- Refactored the C#/.NET codebase, implemented new features for processing 200+ million records, and incorporated a unit test framework to reduce technical debt and promote maintainability, reusability, and scalability
- Assisted in database maintenance and rendered analytical system reports using **Excel**, **SQL**, and **PowerBI**
- Led 6 incoming team members with onboarding and training, and created coding style guidelines and quality control tools

### We Are All Human Foundation

Sep 2023 — Nov 2023

*Web Project Intern*

Remote / New York, NY

- Designed and implemented an intranet website hosted on **Google Sites** using **HTML**, ensuring it aligned with organizational branding and served as a centralized hub for internal information
- Partnered with COO and HR to evaluate and update information architecture, developing comprehensive metadata framework

## RESEARCH

### Marine Biological Laboratory

Aug 2022 — Sep 2022

*Undergraduate Researcher (Supervised by Dr. David Mark Welch and Dr. Elena Peredo)*

Woods Hole, MA

- Conducted and presented field research on microbiome recovery of spurdogs and chain catsharks during skin regeneration
- Analyzed DNA sequencing datasets using **Qiime2** to populate various bioinformatic graphs and statistical visualizations

### UChicago Computing for Anyone (CANON) Lab

May 2022 — Aug 2022

*Undergraduate Researcher (Supervised by Prof. Diana Franklin)*

Chicago, IL

- Designed and developed an educational game QueueBits on **Unity**, introducing quantum computing concepts to youth learners
- Implemented the **JavaScript/React** frontend of Entwine, an educational website transforming paper worksheets to the Scratch programming platform, with features including roster management, class module creation, and project progress check
- Presented feedback analysis and drafted 2 research papers in collaboration with researchers and educators using data collected from 50 Chicago Public School students

### UChicago Human-Robot Interaction (HRI) Lab

Apr 2022 — Jul 2022

*Undergraduate Researcher (Supervised by Prof. Sarah Sebo)*

Chicago, IL

- Conducted dozens of research experiments and analyzed 45 video recordings to compare the ability of humanoid robot NAO and traditional media to successfully foster meaningful human connections
- Supported data analysis in **R** from surveys to extract insights on social robotic studies and create research thesis storyline

### UCSB Religion, Experience, and Mind (REM) Group

Jun 2021 — Aug 2021

*Undergraduate Researcher (Supervised by Prof. Ann Taves and Dr. Elliott Ihm)*

Santa Barbara, CA

- Analyzed and presented findings from 1000+ surveys using **R** for the Inventory of Non-Ordinary Experiences, a project exploring the paranormal and extrasensory experiences contextualized in cognitive social science and psychology
- Led interviews and literacy reviews on the influence of meditation practices and religious/spiritual traditions on non-ordinary experiences

### UCSB Gevirtz Graduate School of Education

Jan 2021 — Aug 2021

*Undergraduate Researcher (Supervised by Prof. Diana Arya)*

Santa Barbara, CA

- Codeveloped a Virtual Reality-based game as an immersive and innovative tool for remedial literacy education
- Designed and implemented game algorithm on **Unity**, and developed 3D art assets on **Blender**

## SKILLS

**Programming:** C/C++, SwiftUI, Python, C#/.NET, Java, JavaScript, HTML, CSS, R, SQL

**Toolbox:** Git, Azure, Firebase, PowerBI, React, CI/CD, TCP, OpenCV, UNIX, LaTeX, Unity, Blender, Arduino, Qiime2, Jupyter, Docker