# Liuhao Wu

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## EDUCATION

**University of Chicago (UChicago)**                                                    Sep 2021 — Jun 2023
- B.S. in Computer Science; **GPA: 3.788**                                          *Chicago, IL*

**University of California, Santa Barbara (UCSB)**                         Aug 2019 — Aug 2021
- Computer Science with Honors (*transferred out*); **GPA: 4.000**          *Santa Barbara, CA*

## EXPERIENCE

**RedMane Technology LLC**                                                              Nov 2023 — Present
*Software Developer*                                                                          *Chicago, IL*
- Supported the design, development, and testing of a customized Client Relationship Management solution for the New Mexico Children, Youth, and Families Department to digitize the child welfare casework management process
- Analyzed solution architecture, created business object models using **Visio**, and translated 700+ high-level business requirements into detailed technical tasks, validating contract requirements and estimating development efforts
- Led 6 incoming team members with onboarding and training, and created coding style guidelines and quality control tools
- 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**

**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 information architecture and develop a 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*
- Presented feedback analysis and drafted 2 research papers in collaboration with researchers and educators using data collected from 50 Chicago Public School students
- 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 digitizing instructional paper worksheets for the Scratch programming platform

**UChicago Human-Robot Interaction (HRI) Lab**                           Apr 2022 — Jul 2022
*Undergraduate Researcher (Supervised by Prof. Sarah Sebo)*                          *Chicago, IL*
- Conducted 12 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** to extract insights on social robotic studies and create a 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 academic 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:**  SQL, R, C#/.NET, C/C++, SwiftUI, Python, Java, JavaScript, HTML, CSS
**Toolbox:**  Git, PowerBI, Excel, Visio, LaTex, Azure, CI/CD, TCP, OpenCV, UNIX, Unity, Blender, Arduino, Qiime2, Jupyter, Docker