

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

EMPLOYMENT

RedMane Technology LLC

Software Developer

Nov 2023 — Present

Chicago, IL

- Participated in designing, developing, testing, and delivering a customized in-house solution for the multi-million dollar New Mexico Child Welfare Information System project
- Analyzed solution architecture, created business object models, and translated high-level business requirements into detailed technical work items, validating contract requirements and estimating development efforts
- Improved the C#/.NET codebase and implemented new functionality to promote reusability and scalability across projects
- Identified technical debt and developed a unit test framework, ensuring reliability and maintainability of the solution
- Assisted in database maintenance and rendered system analytical reports using SQL and PowerBI
- Led new developers with system setup and onboarding, and created coding style guidelines and quality control tools

We Are All Human Foundation

Web Project Intern

Sep 2023 — Nov 2023

Remote / New York, NY

- Designed and implemented an intranet website, ensuring it aligns with organizational branding guidelines and serves as a centralized hub for internal information (e.g., company news, announcements, departmental resources, and organigram)
- Partnered with COO and HR to evaluate and update information architecture, developing comprehensive metadata framework

RESEARCH

Marine Biological Laboratory

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

Aug 2022 — Sep 2022

Woods Hole, MA

- Conducted field research on microbiome recovery of spurdogs and chain catsharks during the skin regeneration process
- Analyzed DNA sequencing datasets using Qiime2 to populate volcano plots, taxonomy charts, and alpha and beta diversity

UChicago Computing for Anyone (CANON) Lab

Undergraduate Researcher (Supervised by Prof. Diana Franklin)

May 2022 — Sep 2022

Chicago, IL

- Designed and developed educational tech tools, including QueueBits on Unity, a game introducing quantum computing concepts
- Developed the 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
- Collaborated with educators to test and improve QueueBits and Entwine, collecting and analyzing feedback from over 50 Chicago Public School students

UChicago Human-Robot Interaction (HRI) Lab

Undergraduate Researcher (Supervised by Prof. Sarah Sebo)

Apr 2022 — Jul 2022

Chicago, IL

- Conducted dozens of research experiments and analyzed 45 video recordings to analyze the effectiveness of humanoid robot NAO, monitor screen, and poster in facilitating interpersonal communications
- Supported data analysis from participants' survey responses to extract insights and create research thesis storyline

UCSB Religion, Experience, and Mind (REM) Group

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

Jun 2021 — Aug 2021

Santa Barbara, CA

- Analyzed 1000+ cognitive social science surveys using R for the Inventory of Non-Ordinary Experiences project
- Led interviews and literacy reviews on medication practices, focusing on religious / spiritual traditions influences

UCSB Gevirtz Graduate School of Education

Undergraduate Researcher (Supervised by Prof. Diana Arya)

Jan 2021 — Aug 2021

Santa Barbara, CA

- Collaborated on a Virtual Reality-based game design and testing for immersive remedial literacy education under the initiative of Community Based Literacies program and McEnroe Reading and Language Arts Clinic
- Designed and implemented game algorithm on Unity and developed 3D art asset on Blender

SKILLS

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

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