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*
- 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 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 over 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 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