Liuhao Wu

Chicago, IL 60647 | (310) 717-4102 | hwu312@gmail.com | liuhaowu.com

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*

EMPLOYMENT

RedMane Technology LLC   Nov 2023 — Present
Software Developer   *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   Sep 2023 — Nov 2023
Web Project Intern   *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   Aug 2022 — Sep 2022
Undergraduate Researcher (Supervised by Dr. David Mark Welch and Dr. Elena Peredo)   *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   May 2022 — Sep 2022
Undergraduate Researcher (Supervised by Prof. Diana Franklin)   *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   Apr 2022 — Jul 2022
Undergraduate Researcher (Supervised by Prof. Sarah Sebo)   *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 Gevirtz Graduate School of Education   Jan 2021 — Aug 2021
Undergraduate Researcher (Supervised by Prof. Diana Arya)   *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

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 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

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