Liuhao Wu

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EDUCATION

University of Chicago (UChicago)

Sep 2021 — Jun 2023

Chicago, IL

University of California, Santa Barbara (UCSB)

B.S. in Computer Science; GPA: 3.788

Aug 2019 — Aug 2021

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

Santa Barbara, CA

EMPLOYMENT

RedMane Technology LLC

Nov 2023 — Present

Chicago, IL

Software Developer Participated in designing, developing, testing, and delivering a customized in-house solution for the multi-million dollar New Mexico Child Welfare Information System project

- Implemented and enhanced the functionality and maintainability of a large-scale software application using C#/.NET, identifying technical debt to streamline system workflow and improve bug resolution processes
- Analyzed solution architecture and created business object models to translate high-level business requirements into detailed technical work items, validating contract requirements and estimating development times
- Managed database by cleaning up legacy records and creating new reports in compliance with Protected Health Information regulations using PowerBI, SQL, and Excel
- Assisted 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

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

EXPERIENCE

Marine Biological Laboratory

Aug 2022 — Sep 2022

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

Woods Hole, MA

- Conducted research on microbiome recovery of spurdogs and chain catsharks during the skin regeneration process
- Analyzed DNA sequencing datasets using Oiime2 to populate volcano plots, taxonomy charts, and alpha and beta diversity

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 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, enhancing robot-human interaction strategies

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 project and McEnroe Reading and Language Arts Clinic
- Designed a radial menu detecting controller inputs with Unity and art asset development with Blender

UCSB Religious Studies and Psychological & Brain Sciences

Jun 2021 — Aug 2021

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

Santa Barbara, CA

- Analyzed 1000+ surveys with 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, Oiime2, Jupyter, Docker