Catherine Ching-Ju Yu

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Education

University of California, Berkeley

Berkeley, CA

Master of Information Management and Systems: GPA 3.9

Aug, 2021 – May, 2023

Relevant Courses: UX Research, Quantitative Research, Data Structures and Analytics (Python), Information

Organization and Retrieval, Applied Machine Learning

National Taiwan University

Taipei, Taiwan

Bachelor of Science in Psychology: GPA 3.6

Sep, 2015 – Jun, 2019

Relevant Courses: UX Design, Psychological Experiment, Statistics, Data Science Programming, Human Cognition

Projects

Language and Information Architecture: A Study of English and Mandarin E-commerce Websites

2021

Research infers that different IA should be chosen when designing website for different culture users.

- Analyzed the IA, faceted categories, and taxonomies of 3 Mandarin and English e-commerce websites.
- Found that Mandarin webs prefer a flatter navigation structure and use more thematic relations and brands.

Effects of Picture Stimulations on the BCI P300 Speller

2021

Investigated how to improve the accuracy of typing-by-thinking using a brain-computer interface speller.

- A p300 speller detects the junction of row and column with the maximum p300 signal (ERP signal) on the keyboard to determine which character the user wants to type.
- Designed 4 conditions, in which different stimuli are used as the flashes (colorful/B&W vs. picture/letter); recruited 7 participants; analyzed and visualized EEG data using R and python; found that picture stimulus evoke a better performance compared with letter stimuli, no matter if the stimuli are colorful.

Can Older Adults' Acceptance Toward Robots be Enhanced by Observational Learning

2019

Through a mixed design approach (1 between and 1 within), the experiment measures the effect of Observational Learning on the acceptance of technology between 40+ older adults and 40+ young people.

- Recruited 90+ participants; developed a questionnaire to measure explicit attitude; coded 2 computer cognitive tasks to measure implicit attitude using Python; analyzed and visualized data using R; filmed and produced video clips.
- Published research in the 22nd International Conference on Human-Computer Interaction (CHI).

i-Path: A Digital Biography for Preserving Older Adults' Wisdom

A digital biography system for assisting older adults with easily preserving their memory.

2019

- Uncovered users' insight by conducting 40+ interviews with older adults and designing surveys; analyzed interviews
 and questionnaires using R to provided analytical results to engineers in the team.
- Published research in the 3rd NTU-Tohoku U Symposium on Interdisciplinary AI and Human Studies.

Experience

UI UX Intern

Taipei, Taiwan

Source Code Inc.

Jan, 2021 – May, 2021

- UI design: designed wireframes and high-fidelity prototypes for a project management system by Adobe XD.
- UX research: designed usability testing process by developing surveys and interview drafts.

Marketing Intern

Taipei, Taiwan

AVL Avance Venture Lab

Jan, 2021 – May, 2021

- Social Media Marketing: managed FB fan page by copywriting and designing pictures using Photoshop and Canva.
- Research: conducted market research and competitive analysis on the online language education industry.

Full-Time Research Assistant

Taipei, Taiwan

Center for Artificial Intelligence and Advanced Robotics, National Taiwan University

July, 2019 – June, 2020

• Led and cooperated with 2 engineers to accomplish a digitalized autobiography project; in charge of applying Institutional Review Board (IRB) for all the research projects in our lab; organized interdisciplinary research regarding the combination of AI and psychology to write final projects.

Skills and Tools

UX Research: Interview, Questionnaire Design, Usability Testing; **Programming Language:** Python, C#, R, Git, HTML; **Data Analysis & Visualization:** ANOVA, t-test, Regression, Ggplot2, Tidyverse, Numpy, Pandas, Matplotlib; **Design:** Adobe XD, Photoshop; **Language:** Mandarin(native), German(basic)