# Catherine Ching-Ju Yu

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#### **Education**

### University of California, Berkeley

2021-2023

Master of Information Management and System: GPA 3.9

Relevant Courses: UX Research (*in progress*), Quantitative Research, Data Structures and Analytics (Python), Information Organization and Retrieval, Applied Machine Learning (*in progress*)

## **National Taiwan University**

2015-2019

Bachelor of Science in Psychology: GPA 3.6

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

## **Projects**

## [IA] Language and Information Architecture: A Study of English and Mandarin E-commerce Websites

Explored cultural difference in the information architecture of E-commerce websites.

- Analyzed the information architectures, faceted categories, and taxonomies of 3 Mandarin and English e-commerce websites; Conducted a cross-cultural comparison between the two language websites.
- Found that Mandarin webs prefer a flatter navigation structure and use more thematic relations and brands.

## [HCI] Effects of Picture Stimulations on the BCI P300 Speller

2021

2021

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

- Designed and implemented the experiment by creating pixel-rearranged picture stimuli using Python; recruited 7 participants; analyzed and visualized EEG data using R and python.
- Found that picture stimuli evoke a better performance compared with letter stimuli.

## [HCI] Can Older Adults' Acceptance Toward Robots be Enhanced by Observational Learning

2019

Discovered if positive attitude to technology can be learned by Observational Learning, a common humans' learning skill

Recruited 90+ participants to conduct behavioral experiments: developed a questionnaire to measure explicit attitude:

- Recruited 90+ participants to conduct behavioral experiments; 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 using PowerDirector.
- Published research in the 22nd International Conference on Human-Computer Interaction (CHI).

## [HCI] i-Path: A Digital Biography for Preserving Older Adults' Wisdom

A digital biography system for assisting older adults to easily preserve their memory

2019

- Uncovered users' insight by conducting 40+ user interviews and self-developed surveys
- 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; Conduct user research as the only researcher on the team
- Organized interdisciplinary research regarding the combination of AI and psychology to write final projects

#### **Skills and Tools**

**Programming Language:** Python, C#, R, Git; **Data Analysis & Visualization:** ANOVA, t-test, Regression, ggplot2, dplyr, numpy, pandas, matplotlib; **UX:** Adobe XD, Photoshop **Language:** Mandarin(native), German(basic)