

Catherine Yu

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Data Scientist with 3 years of experience in HCI, UX, and data science. Proven ability to translate real-world problems into scaled research questions, conduct data-driven research, and create business impact.

Featured Projects

Sage. a NLP-based browser plug-in that empowers aging workers to excel in online job searching 2023

- Fine-tuned a BERT-based model using PyTorch. The model can identify implicit ageist terms in real-world job ads with an accuracy of 0.87, increasing 30% from the baseline.

Wax. the Gen AI writing assistant that turns rough notes into finished content 2023

- Implemented prompt engineering to fine-tune LLaMA2 7b running on AWS SageMaker.

Leaf classification. an Image Processing feature extraction approach to Machine Learning 2022

- Extracted 7 features from 8000+ leaf images each. Implemented non-linear SVM classifiers with the features to classify 14 leaf species. The model achieved an F1 score of 0.8 on the testing data.

Slack Connect. evaluated Slack Connect's potential of being a portal that integrates Salesforce's B2B services 2022

- Partnered with Salesforce UX team to conduct competitive analysis, 10 user interviews, and async focus groups to achieve generative research under constraint timeline.

Professional Experience

UX Researcher

Frisco, TX

Glia Health: a healthcare mobile app for early detection of neurological impairment June, 2022 – Nov, 2022

- Conducted usability testing for the app to ensure alignment with the design prototype, reducing the implementation timeline by 50%; designed user flows and low fidelity interfaces.

Research Assistant

Taipei, Taiwan

Center for Artificial Intelligence and Advanced Robotics, National Taiwan University July, 2019 – June, 2020

- Collected and analyzed 200+ surveys and behavioral experiment data for validation of a web-based speech-to-text autobiography system for assisting older adults with preserving their memory and improving mental health.
- Published research in the 3rd NTU-Tohoku U Symposium on Interdisciplinary AI and Human Studies.

Undergraduate Researcher

Taipei, Taiwan

Department of Psychology, National Taiwan University July, 2018 – June, 2019

- Designed a 2x2 between-group experiment with 90 participants to explore methods to improve the elderly's acceptance toward social robots.
- Analyzed survey, cognitive tests, and interview data through statistical analysis and visualization using R.
- Research significantly discovered observational learning's role in improving older people's acceptance. Published research in the 22nd International Conference on Human-Computer Interaction (CHI).

Education

University of California, Berkeley

Berkeley, CA

Master of Information Management and Systems

Aug, 2021 – May, 2023

Graduate Certificate in Applied Data Science

Relevant Courses: Natural Language Processing, Applied Machine Learning, Experiments and Causal Inference, Quantitative Research Methods, Data Science, Data Structures

National Taiwan University

Taipei, Taiwan

Bachelor of Science in Psychology

Sep, 2015 – Jun, 2019

Relevant Courses: Data Science Programming, Statistics, Psychological Experiment, Computer Programming (C#)

Skills and Tools

Programming Language & Tools: Python, R, SQL, Excel, Git, HTML, CSS, C#, AWS; **Data Analysis:** Numpy, Pandas, Matplotlib, Scikit-learn, PyTorch; **UX Research:** Experiment, Survey, Usability Testing, Interview;

