Alice Gao

University of Washington

email: atgao@cs.washington.edu URL: https://atgao.github.io/

Areas of interest

Human-computer interaction • Cross-cultural research • UI understanding • Culturally adaptive digital technologies

Education

2022-Present 2021-2022

РнD in Computer Science & Engineering, University of Washington MSc in Computer Science & Engineering, University of Washington

2017-2021

2025

2024

2022

BS in Computer Science, Princeton University

Publications

* denotes equal contribution

CONFERENCE AND JOURNAL PAPERS

2025

Donghoon Shin, Alice Gao, Rock Pang, Katharina Reinecke, Emily Tseng How Vibe Coding Might Worsen Global Design Homogenization: An Empirical Study of LLM-Driven Website Localization In Submission.

Alice Gao, * Samyukta Jayakumar, * Marcello Maniglia, * Brian Curless, Ira Kemelmacher-Shlizerman, Aaron R. Seitz and Steven M. Seitz. Don't Look at the Camera: Achieving Perceived Eye Contact. Journal of Vision 24(10), https://doi.org/10.1167/jov.24.10.1094, Sep 2024. (arxiv ver.)

Alice Gao, Wataru Akahori, Naomi Yamashita, and Katharina Reinecke. Using Slack in the US and Japan: Surfacing Cultural Asymmetries in Overcoming Shortcomings. In Submission.

Workshop Papers & Posters

K.J. Kevin Feng*, Alice Gao*, Johanna Suvi Karrass*. Towards Semantically Aware Word Cloud Shape Generation. Adjunct Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST '22 Adjunct). Bend, OR. October 2022.

Research Experience

Ian 2024 -Present

Research Assistant, Wildlab, University of Washington

Advisor: Katharina Reinecke

- Developing machine learning techniques to predict the usability of GUIs for different demographic groups.

1

- Developing machine learning models to analyze website designs (GUIs) at a design component level to detect demographically salient regions of preferred designs and automate generation of better, personalized UI designs for different demographics
- Surfacing asymmetries in the use of digital technologies and developing methods and tools to create more suitable tools for diverse user groups.
- Mixed-methods to investigate AI over reliance and potential effects of value clash when using AI writing tools for different demographic groups

Research Assistant, GRAIL, University of Washington Sep 2021-

Jan 2024 Advisor: Steve Seitz, Brian Curless, Ira Kemelmacher-Shlizerman

Studied and developed machine learning techniques to direct attention and eye gaze for a more

attentive video conferencing experience.

Undergraduate Research Assistant, Princeton Vision & Learning Lab, Princeton University Sep 2019-Feb 2021

Advisor: Jia Deng; mentored by Hei Law

Researched how to improve associative embedding predictions and groups, which represents pix-

els in an image, for a one-stage object detector used for instance segmentation.

Teaching

University of Washington (graduate)

CSE373: Data Stuctures & Algorithms, Teaching Assisstant Fall 2025

CSE581: Computer Ethics, Teaching Assistant Spring 2024

CSEP557: Current Trends In Computer Graphics, Teaching Assistant Fall 2024

CSE581: Computer Ethics, Teaching Assistant Winter 2024

Princeton University (undergraduate)

COS426: Computer Graphics, Undergraduate Teaching Assistant Spring 2020

COS226: Algorithms & Data Structures, Course Grader Fall 2018-Fall 2019

Industry Experience

Tech Intern in Online Account Opening; Capital One; New York City, New York Jun-Aug 2020

Created new endpoint and unit tests, laid framework for streaming data platform, and launched

new security groups.

AI Design Lab Intern; Tezign; Shanghai, China Jun-Aug 2019

Assisted in optimizing image retrieval to match similar designs and contributed to training a model

in judging strong vs weak graphic designs.

Technical and App Development Intern; Princeton Satellite Systems; Princeton, New Jersey Jun-Aug 2018

Devised beginnings of gameplay for spacecraft simulation iOS app. Created 3D models for Phase

II version of Direct Fusion Drive (DFD), a direct-drive, fusion-powered rocket engine.

Service and Leadership

May 2018 -Mar 2020 co-President, Princeton Chinese Students Association

Started a new Red Envelope fundraiser, acted as a liaison between guest speakers and CSA, participated in creating the first Asian+Students Council, organized and raised funding to host Steven Lim as a guest speaker, started weekly community nights (mahjong nights) that persist until today.

Skills

Languages: Python, R, SQL, TypeScript, JavaScript, C, Go

Frameworks: PyTorch, scikit-learn, Pandas, React, Sveltekit, Node.js, Django/DRF, Flask

Tools: Docker, Apptainer, Figma

Last updated: September 27, 2025