

Alice Gao

University of Washington
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Areas of interest

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

Education

2022-Present	PhD in Computer Science & Engineering, University of Washington
2021-2022	MSc in Computer Science & Engineering, University of Washington
2017-2021	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 <i>In Submission</i> .
2025	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. <i>Journal of Vision</i> 2025; 25(11):8, https://doi.org/10.1167/jov.24.10.1094 .
2024	Alice Gao , Wataru Akahori, Naomi Yamashita, and Katharina Reinecke. Using Slack in the US and Japan: Surfacing Cultural Asymmetries in Overcoming Shortcomings. <i>In Submission</i> .

WORKSHOP PAPERS & POSTERS

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

Jan 2024 - Present	Research Assistant, Wildlab, University of Washington <i>Advisors:</i> Katharina Reinecke and R. Benjamin Shapiro - Developing machine learning techniques to predict the usability of GUIs for different demographic groups.
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- 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

Sep 2021-
Jan 2024

Research Assistant, **GRAIL, University of Washington**

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.

Sep 2019-
Feb 2021

Undergraduate Research Assistant, **Princeton Vision & Learning Lab**, Princeton University

Advisor: Jia Deng; mentored by Hei Law

Researched how to improve associative embedding predictions and groups, which represents pixels in an image, for a one-stage object detector used for instance segmentation.

Teaching

University of Washington (graduate)

Fall 2025

CSE373: Data Structures & Algorithms, *Teaching Assistant*

Spring 2024

CSE581: Computer Ethics, *Teaching Assistant*

Fall 2024

CSEP557: Current Trends In Computer Graphics, *Teaching Assistant*

Winter 2024

CSE581: Computer Ethics, *Teaching Assistant*

Princeton University (undergraduate)

Spring 2020

COS426: Computer Graphics, *Undergraduate Teaching Assistant*

Fall 2018-Fall 2019

COS226: Algorithms & Data Structures, *Course Grader*

Industry Experience

Jun-Aug 2020

Tech Intern in Online Account Opening; Capital One; New York City, New York

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

Jun-Aug 2019

AI Design Lab Intern; Tezign; Shanghai, China

Assisted in optimizing image retrieval to match similar designs and contributed to training a model in judging strong vs weak graphic designs.

Jun-Aug 2018

Technical and App Development Intern; Princeton Satellite Systems; Princeton, New Jersey

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: October 4, 2025