Kai Ji "Kevin" Feng

Email: kjfeng@uw.edu

Web: kjfeng.me

Research Interests

Human-computer interaction: social and collaborative computing, interactive machine learning.

Education

2021 - University of Washington, Seattle, WA

Ph.D. Human Centered Design & Engineering

Co-advisors: David W. McDonald (HCDE), Amy X. Zhang (CSE)

2017 - 2021 Princeton University, Princeton, NJ

B.S.E. Computer Science, Magna cum laude

Thesis: Lowering the Barrier for Web Advertisement Research at Scale

Advisor: Arvind Narayanan

Minors: technology & society, visual arts

o_I - o₅ 2020 National University of Singapore, Singapore

Visiting Student, Computer Science

Publications

* denotes equal contribution.

Refereed Conference and Journal Papers

- [c.4] **K. J. Kevin Feng**, Tony W. Li, Amy X. Zhang. Understanding Collaborative Practices and Tools of Professional UX Practitioners in Software Organizations. *ACM Conference on Human Factors in Computing Systems (CHI '23)*. Hamburg, Germany. April 2023. [28.4% acceptance rate].
- [c.3] K. J. Kevin Feng, David W. McDonald. Addressing UX Practitioners' Challenges in Designing ML Applications: an Interactive Machine Learning Approach. *ACM Conference on Intelligent User Interfaces (IUI '23)*. Sydney, Australia. March 2023. [24.1% acceptance rate].
- [c.2] **K. J. Kevin Feng**, Kevin Song, Kejing Li, Oishee Chakrabarti, Marshini Chetty. Investigating How University Students in the United States Encounter and Deal With Misinformation in Private WhatsApp Chats During COVID-19. *Eighteenth Symposium on Usable Privacy and Security (SOUPS '22)*. Boston, MA. August 2022. [27.8% acceptance rate].

[c.1] Ruoxi Shang, **K. J. Kevin Feng**, Chirag Shah. Why Am I Not Seeing It? Understanding Lay Users' Needs in Counterfactual Explanations for Everyday Recommendations. *ACM Conference on Fairness, Accountability, and Transparency (FAccT '22)*. Seoul, South Korea. June 2022. [25.2% acceptance rate].

Workshop Papers and Posters

- [w.3] **K. J. Kevin Feng**, David W. McDonald, Amy X. Zhang. Teachable Agents for End-User Empowerment in Personalized Feed Curation. *Optimizing for What? Algorithmic Amplification on Society, a Knight First Amendment Institute symposium*. New York City, NY. April 2023. [18.9% acceptance rate].
- [w.2] **K. J. Kevin Feng***, Alice Gao*, Johanna S. Karras*. Towards Semantically Aware Word Cloud Shape Generation. *Adjunct Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '22)*. Bend, OR. October 2022.
- [w.1] **K. J. Kevin Feng**, Amy X. Zhang. From Handoffs to Co-Creation: Deepening Collaboration between Designers, Developers, and Data Science Workers in UX Design. *InContext Workshop at ACM Conference on Human Factors in Computing Systems (CHI '22)*. New Orleans, LA. May 2022.

THESES AND NON-REFEREED PAPERS

- [n.2] **K. J. Kevin Feng**, Arunesh Mathur, Arvind Narayanan. Lowering the Barrier for Web Advertisement at Scale. *Princeton University Department of Computer Science*. Princeton, NJ. April 2021.
- [n.1] **K. J. Kevin Feng**, Adam Finkelstein. Saving the Sonorine: Photo-Based Audio Recovery With Photometric Stereo. *Princeton University Department of Computer Science*. Princeton, NJ. January 2020.

CONFERENCE PAPERS IN SUBMISSION

- **K. J. Kevin Feng**, Maxwell Coppock, David W. McDonald. Analyzing How UX Practitioners Communicate ML in Low-Fidelity Designs [title modified to ensure blind review].
- **K. J. Kevin Feng**, Nick Ritchie, Pia Blumenthal, Andy Parsons, Amy X. Zhang. Effect of Provenance-Enabled Social Media Feeds on Perceptions of Media [title modified to ensure blind review].

Research Experience

Fairness, Accountability, Transparency, and Ethics (FATE) Group, Microsoft Research, Montréal, Canada

Research Intern

Host: Q. Vera Liao

Language models as a UX design material.

OI 2022 -

Paul G. Allen School of Computer Science & Engineering, University of Washington, Seattle, WA

Graduate Research Assistant

Advisor: Amy X. Zhang

Social media feed curation via machine teaching.

09 2021 - Human Centered Design & Engineering, University of Washington, Seattle, WA

Graduate Research Assistant

Advisor: David W. McDonald

Interactive machine learning for UX practitioners to design ML-enabled applications.

08 2020 - University of Chicago AIRLab, Remote

^{07 2021} Visiting Undergraduate Researcher

Advisor: Marshini Chetty

Investigating How University Students in the United States Encounter and Deal With Misinformation in Private WhatsApp Chats During COVID-19 [c.2].

o6 2020 - Center for Information Technology Policy, Princeton, NJ

06 2021 Undergraduate Researcher

Advisor: Arvind Narayanan

AdOculos: a search platform and dataset for analyzing ads on the web, aided by computer vision [n.2].

05 - 08 2020 Fluid Interfaces Group, MIT Media Lab, Remote

Visiting Undergraduate Researcher

Host: Nataliya Kosmyna

User-centered data visualizations for EEG and EOG sensing smart glasses.

02 - 04 2020 Smart Systems Institute, National University of Singapore, Singapore

Research Engineer Intern

Host: Chor Guan Teo

Assisting dentists in intraoral radiography using augmented reality on a mobile device.

09 2019 - Department of Computer Science, Princeton University, Princeton, NJ

⁰¹ 2020 Undergraduate Researcher

Advisor: Adam Finkelstein

Photo-based audio recovery for sonorines (early 20th century precursor to vinyl records) [n.1].

Industry Work Experience

06 - 09 2022 Microsoft, Responsible AI Tools, Bellevue, WA

Program Manager Intern

Conducted research on the role of machine learning scorecards in facilitating multi-stakeholder conversations about model deployment.

06 - 08 2021 Microsoft, Data Platforms + Growth, Remote

Program Manager Intern

Launched UI for data analysts to better organize and take action on their data.

09 2018 - Princeton Digital Learning Lab, Princeton, NJ

o6 2021 Lab Assistant

Helped students make the most use of in-lab programming and design tools for their academic and personal projects.

06 - 08 2019 **The Muse**, New York, NY

Product Management Intern

Built and launched new job search recommendation feature with a team of 2 engineers and a designer.

o6 - o8 2018 **Solomoto**, Tel Aviv, Israel

Product Design Intern

Data dashboard design for small business management SaaS platform.

Awards & Honours

UW Herbold Fellowship
Princeton Research Day Faculty Highlighted Project (Computer Science)
Princeton Council for Science and Technology Independent Project Award
Princeton Office of Undergraduate Research Summer Research Award
IDEO CoLab Fellowship Finalist
Keller Center for Innovation in Engineering Education Summer Fellow

Talks & Panels

Teachable Agents for End-User Empowerment in Personalized Feed Curation, Optimizing for What? Symposium by the Knight First Amendment Institute

What? Symposium by the Knight First Amendment Institute

User Perceptions of Media in Provenance-Enabled Social Media Feeds, Coalition for Content Provenance and Authenticity (C2PA) Technical Working Group

Lowering the Barrier for Web Advertisement Research at Scale, Princeton CITP, Princeton Research Day

04 2020 User Interface Design, Prototyping, and Testing, Princeton ACM Chapter

Photo-based Audio Recovery Using Image Processing and Computer Vision Techniques, Department of Computer Science, Princeton University

Introduction to User Interface Design, HackPrinceton 2018 + 2019

Service

11 2018.

2021 - **Reviewing:** UIST 2022, CSCW 2023, CHI 2023, DIS 2023

Student Volunteer: IUI 2022, UIST 2022, CHI 2023

Departmental Service: HCDE Visit Days 2023 session leader

- 2020 2021 Organizer, Princeton intersession course on ethical technology
- 2019 2021 Princeton School of Engineering First-Year Student Advisor
- 2018 2021 Founder, Rehack (reverse hackathon for development of more socially responsible technologies)

Skills

Technical: Python, JavaScript, Java, Unity, C, OCaml, Go, SQL, HTML/CSS, LATEX.

Other: Adobe Creative Suite, Figma, user research (interviews, surveys, qualitative coding), laser cutting, art exhibition installation, bookbinding, photography.