

jane l. e

postdoc [at] stanford hai · incoming assistant professor at nus · ejane [at] stanford.edu · ejane.me

incoming in 2025 Singapore	National University of Singapore Assistant Professor in Computer Science · Smart Systems Institute Affiliate
2024 – present Stanford, CA	Stanford University Stanford HAI Postdoctoral Fellow National University of Singapore Adjunct Professor · Smart Systems Institute Affiliate Mentor · <i>James Landay</i>
2021 – 2024 La Jolla, CA	University of California, San Diego Design Lab Postdoctoral Fellow in CSE & Cognitive Science Mentors · <i>Haijun Xia & Steven Dow</i>
2014 – 2021 Stanford, CA	Stanford University PhD in Computer Science · d.school Creativity in Research Scholar Advisors · <i>James Landay & Pat Hanrahan</i> Committee · <i>Maneesh Agrawala, Scott Klemmer & Ge Wang (chair)</i> Dissertation · <i>Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions</i>
2008 – 2012 Princeton, NJ	Princeton University Bachelor of Science in Engineering · cum laude Advisors · <i>Thomas Funkhouser & Szymon Rusinkiewicz</i> Major · <i>Computer Science</i> Certificate · <i>Applied & Computational Mathematics</i>

publications

C&C 2024	When to Give Feedback: Exploring Tradeoffs in the Timing of Design Feedback Jane L. E* , Yu-Chun Yen*, Isabelle Pan, Grace Lin, Mingyi Li, Hyoungwook Jin, Mengyi Chen, Haijun Xia & Steven Dow.
CSCW 2024	ProcessGallery: Contrasting Early and Late Iterations for Design Principle Learning Yu-Chun Yen*, Jane L. E* , Hyoungwook Jin, Mingyi Li, Grace Lin, Isabelle Pan & Steven Dow.
IUI 2024	Jamplate: Exploring LLM-Enhanced Templates for Idea Reflection Xiaotong Xu, Jiayu Yin, Catherine Gu, Jenny Mar, Sydney Zhang, Jane L. E & Steven Dow.
UIST 2023	Color Field: Developing Professional Vision by Visualizing the Effects of Color Filters Matthew Beaudouin-Lafon, Jane L. E & Haijun Xia.
🏆 CHI 2023	DataParticles: Block-Based and Language-Oriented Authoring of Animated Unit Visualization Yining Cao, Jane L. E , Zhutian Chen & Haijun Xia. <i>Best Paper Award</i>
UIST 2021	Dynamic Guidance for Decluttering Photographic Compositions Jane L. E , Kevin Zhai, Jose Echevarria, Ohad Fried, Pat Hanrahan & James Landay.

* Authors contributed equally

🏆 Best Paper Award

- 2021 **Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions**
Jane L. E. *Dissertation*
- CHI 2020 **Adaptive Photographic Composition Guidance**
Jane L. E, Ohad Fried, Jingwan Liu, Jianming Zhang, Radomír Měch, Jose Echevarria, Pat Hanrahan & James Landay.
- UIST 2019 **Optimizing Portrait Lighting at Capture-Time Using a 360 Camera as a Light Probe**
Jane L. E, Ohad Fried & Maneesh Agrawala.
- CHI 2018 **How Teens with Visual Impairments Take, Edit, and Share Photos on Social Media**
Cynthia Bennett, Jane L. E, Martez Mott, Edward Cutrell & Meredith Morris.
- CHI 2018 **Understanding the Accessibility of Smartphone Photography for People with Motor Impairments**
Martez Mott, Jane L. E, Cynthia Bennett, Edward Cutrell & Meredith Morris.
- UbiComp 2017 **Drone Near Me: Exploring Touch-Based Human-Drone Interaction**
Parastoo Abtahi, David Zhao, Jane L. E & James Landay.
- CHI 2017 **Drone & Wo: Cultural Influences on Human-Drone Interaction Techniques**
Jane L. E, Ilene E, James Landay & Jessica Cauchard. *Note*
- arXiv 2016 **Towards a Drone Cinematographer: Guiding Quadrotor Cameras using Visual Composition Principles**
Niels Joubert*, Jane L. E*, Dan Goldman, Floraine Berthouzoz, Mike Roberts, James Landay & Pat Hanrahan.
- UbiComp 2015 **Drone & Me: An Exploration Into Natural Human-Drone Interaction**
Jessica Cauchard, Jane L. E, Kevin Zhai & James Landay. *Note*
- SCA 2015 **Automatic Generation of Anatomical Face Simulation Models**
Matthew Cong, Michael Bao, Jane L. E, Kiran Bhat & Ronald Fedkiw.

extended abstracts

- SIGCSE 2023 **Developing Comic-based Learning Toolkits for Teaching Computing to Elementary School Learners**
Francisco Casto, Sangho Suh, Jane L. E, Weena Naowaprateep & Yang Shi. *Poster*
- C&C 2019 & UIST 2018 **Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions**
Jane L. E. *Creativity & Cognition Graduate Student Symposium*
Jane L. E. *UIST Doctoral Symposium*
- CHI 2017 **Human Perception of Swarm Robot Motion**
Griffin Dietz, Jane L. E, Peter Washington, Lawrence Kim & Sean Follmer. *Late Breaking Work*

magazine articles

- XRDS 2023 **Exploring the Horizon of Computation for Creativity**
Sam Bourgault & Jane L. E.
- XRDS 2023 **Machines as Collaborators for Art and Rituals: An Interview with Sougwen Chung**
Jane L. E, Cathy Fang & Sam Bourgault.

book chapter

- 2021 **Designing Photography Guidance for Rapid In-Camera Iteration**
Jane L. E & James A. Landay. *Design Thinking Research: Understanding Innovation*. Springer. 151-165

patent

- 2021 **Adaptive Image Armatures with Interactive Composition Guidance**
Radomír Měch, Jose Echevarria, Jingwan Lu, Jianming Zhang & **Jane L. E**

awards & grants

- 2024 **Invited as a Heidelberg Laureate Forum Young Researcher**
2023 **CHI Best Paper Award**
2022 **Selected for Rising Stars in EECS Workshop**
2021 – 2023 **UCSD CSE's Debut Postdoctoral Fellows Program**
2018, 2021 **Adobe Research Collaboration Grant**
2019 **Hasso Plattner Institute Design Thinking Research Program**
2018 – 2020 **Microsoft Research Dissertation Grant**
2015, 2017, 2018 **The Brown Institute for Media Innovation: Magic Grant** · Artistic Vision / Camera Observa / G:Drone
2016 **The Brown Institute for Media Innovation: Magic Grant & Fellowship** · RoughCut
2015 **Microsoft Research Women's Scholarship**
2015 **NSF GRFP Honorable Mention**
2008 **Edward J. Bloustein Scholar**
2008 **West Windsor-Plainsboro High Honor Award, Service Award & PTSA Scholarship Award**
2007 **1st place in NJIT High School Programming Contest**

work experience

- Summer 2018 **Adobe Research** · Emerging Graphics Group Intern · *Mentor: Jose Echevarria*
San Jose, CA
• Designed and implemented in-camera adaptive composition guidance interface in iOS
- Summer 2017 **Microsoft Research** · Research Intern · *Mentor: Neel Joshi*
Redmond, WA
• Designed and implemented drone camera interface using familiar multitouch gestures in iOS
• Collaborated on design and facilitation of interviews to understand accessibility of mobile photography
- Summer 2015 **Adobe Research** · Creative Technologies Lab Intern · *Mentor: Floraine Berthouzoz*
San Francisco, CA
• Designed and implemented a Unity-based system for previewing and capturing drone shots according to cinematography principles for dialogue scenes
- Fall 2012 – 2014 **Microsoft Corporation** · Software Development Engineer
Redmond, WA
• Developer on Photos for Windows 8 & 10: main features implemented included rotate and straighten
• Designed and implemented infrastructure / interface for internal feedback tool to assess image analysis algorithms
- Spring 2011 – 2012 **Princeton Graphics** · Undergrad Researcher · *Advisors: Thomas Funkhouser & Szymon Rusinkiewicz*
Princeton, NJ
• Extended Chen et al.'s work on extracting feature ("Schelling") points on 3D meshes to feature lines
• Led collection and analysis of Mechanical Turk dataset of Schelling lines
• Submitted for junior independent work & senior thesis: Schelling Lines on 3D Surface Meshes
- Summer 2010 **Microsoft Corporation** · Software Development Engineer Intern
Redmond, WA
• Developer on Photo Gallery: implemented prototype of color filter search and grouping by image similarity (based on a Microsoft Research library)
- Summer 2009 **Princeton Summer Programming Experiences** · Participant
Princeton, NJ
• Implemented handwriting recognition program using neural networks
• Program run by Professor Kevin Wayne for prospective Computer Science students to work with a graduate student mentor on a self-selected project
- Summer 2007 **Microsoft Research Asia** · High School Research Engineer Intern
Beijing, China
• Implemented algorithm to analyze data to differentiate between inline, superscript, and subscript text for the handwritten mathematical formula recognition project

contributions to diversity

- 2023 – 2024
UCSD **UCSD Design Lab Impact and Student Culture Organization (DISCO)** · Founding Member
- Part of the initial team of Design Lab members working with the director to design and implement programs around building a culture of service and community at the Design Lab
 - Co-led initiative to create a mentorship program within the lab
- Summer 2021
UCSD **Learning@Scale / EMOOCS 2021** · ConferenceBuddies Co-Organizer
- Helped organize a new initiative to match first-time conference-goers with more senior attendees (with Armando Fox, Berkeley and co-founder of the Learning@Scale conference)
- Spring 2021
UCSD **UCSD CSE Early Research Scholars Program** · Application Reviewer
- Reviewed essay questions from student applications
 - Team-based research apprentice experience for underrepresented students early in CS career
- Fall 2020
Stanford **Stanford CS Student-Application Support Program** · Application Reviewer
- Student-led program to assist underrepresented CS PhD applicants
 - Reviewed and gave feedback to PhD applicants on application materials
- 2020 – 2022
Stanford **Stanford CS Undergraduate Mentoring Program** · Mentor
- Student-led program for mentoring underrepresented undergraduates interested in research
 - Mentored an undergraduate on college planning and seeking research opportunities
- 2018 – 2019
Stanford **WiGRAPH Berthouzoz Women in Research Lunch** · Student Volunteer [Design & Photography]
- Assisted in contacting panelists and coordinating publicity efforts
 - Designed publicity materials, program, and speaker gifts
 - Networking lunch at SIGGRAPH hosting a panel of established women in graphics each year; has grown from a small informal gathering to an event with over 100 participants
- 2017 – 2020
Stanford **Grace Hopper Conference Career Fair** · Student Representative at Stanford Booth
- Assisted students in understanding the CS PhD application process
 - Reviewed and discussed application materials
 - Recommended and helped initiate contact with professors
 - Maintained contact with a number of students—one was convinced that she could apply to Stanford after we spoke at the conference and is now there pursuing her PhD
- 2016 – 2018
Stanford **Stanford-Berkeley Women in CS / EE Research Meetup** · Co-Organizer & Photographer
- Mini conference aiming to strengthen ties between women researchers at Berkeley and Stanford
 - Invited keynote speaker, industry research and academia panelists, organized talks and poster sessions, arranged social / networking opportunities
 - For more information: <https://stanfordberkeleyresearchmeetup.wordpress.com/>
- Summer 2015
Adobe Research **Girls Who Code** · Intern Mentor
- Co-mentored one of the high school participants with a full-time Adobe employee
- Fall 2015
Stanford **Castilleja School Girls Hackathon** · Design & Tech Mentor
- Co-mentored the youngest group (6th grade) in day-long hackathon to design and implement a game
- 2011 – 2012
Princeton **Chinese-American Princeton Siblings** · Mentor
- Mentored a local Chinese-American high school student

institutional service & leadership

- Summer 2022 & 2023
UCSD **UCSD Design Lab Undergrad Summer Research Program** · Mentor
- Mentored several undergraduate students per summer on research projects
 - Led HCI & design career panels / resume workshops for intern cohort
- Fall 2021
UCSD **UCSD Design Lab Research Meeting** · Organizer
- Invited speakers and planned activities / discussion topics for the research lab meetings

Fall 2021 UCSD	UCSD Design & Innovation Building Spaces Committee · Committee Member <ul style="list-style-type: none"> Discussed how to shape the framework and procedures for allocating space in the new building with a group of Design Lab faculty, postdocs, and PhD students
2018 – 2019 Stanford	Stanford CS PhD Admissions Committee · Student Committee Member <ul style="list-style-type: none"> Reviewed PhD applications and participated in committee-wide admissions meetings
2017 – 2018 Stanford	Stanford HCI Group Lunch · Co-Organizer <ul style="list-style-type: none"> Invited speakers and planned discussion topics for the talk series (with Liz Murnane, Dartmouth) For speakers who were interested, arranged meetings with students and professors in the group
Spring 2016 Stanford	Stanford CS PhD Admit Weekend · Research Area Student Lead <ul style="list-style-type: none"> Organized dinner and events for Graphics & HCI PhD admits
2014 – 2016 Stanford	Common Origins Dance Company · Publicity Officer <ul style="list-style-type: none"> Designed company gear and publicity materials for workshops and events
2012 – 2014 Microsoft	Princeton Career Fair · Alumni Recruiter at Microsoft Booth <ul style="list-style-type: none"> Talked to students about full-time and internship opportunities at Microsoft Reviewed resumes and selected candidates for on-campus interviews Organized and facilitated Microsoft at Princeton Hackathon
2012 – 2014 Microsoft	Princeton Club of Western Washington · Young Alumni Coordinator <ul style="list-style-type: none"> Organized mixers and events for recent graduates and interns Featured on the Daily Princetonian and Alumni Association of Princeton University: http://alumni.princeton.edu/volunteer/profiles/StewardshipLopezE14.pdf
2008 – 2012 Princeton	Triple 8 Dance Company · President, Costume Coordinator <ul style="list-style-type: none"> Designed company gear and coordinated with choreographers to design costumes for each piece Represented our company at meetings with the broader student performing arts community, ran company practices and board meetings, managed logistics for our annual show
2008 – 2010	Princeton Bric-A-Brac Yearbook · Section Editor
2005 – 2008	WWP High School South Yearbook · Editor-in-Chief, Section Editor

service to profession

2024 – 2026	Creativity & Cognition 2025 & 2026 · Organizing Committee <ul style="list-style-type: none"> Graduate Student Symposium Co-Chair (with Steven Dow, UCSD)
2024 – 2025	CHI 2025 · Associate Chair <ul style="list-style-type: none"> Subcommittee: Blending Interaction: Engineering Interactive Systems & Tools
2023 – 2024	Creativity & Cognition 2024 · Organizing Committee, Session Chair, DEI Panelist <ul style="list-style-type: none"> Maintaining conference website as Web Co-Chair (with Grace Yen, UCSD): http://cc.acm.org/2024/ Session Title: Co-Creation
2023	UIST 2023 · Associate Chair
2023	XRDS: Crossroads, The ACM Magazine for Students · Summer Issue Co-Guest Editor <ul style="list-style-type: none"> Invited authors to write articles for special issue: Computer-Aided Media Co-authored an introduction to the topic and invited articles (with Sam Bourgault, UCSB)
2022 – 2023	Creativity & Cognition 2023 · Organizing Committee <ul style="list-style-type: none"> Maintained conference website as Web Co-Chair (with Bradley Rey, UBC): http://cc.acm.org/2023/
2021 – 2022	UIST 2022 · Organizing Committee, Associate Chair, Session Chair <ul style="list-style-type: none"> Designed and maintained conference website, logo, and badges as Web and Design Co-Chair (with

Jasper Tran O'Leary, UW): <http://uist.acm.org/uist2022/>

- Session Title: Storytelling and Presentation

2022 **CHI 2022** · Associate Chair, Session Chair

- Subcommittee: Interacting with Devices
- Session Title: Creativity Support Tools

2020 – 2021 **UIST 2021** · Organizing Committee, Associate Chair, Session Chair

- Designed and maintained conference website and logo as Web and Design Co-Chair (with Toby Li, Notre Dame): <http://uist.acm.org/uist2021/>
- Session Title: Wrangling Data for Authoring & Analysis

2015 – 2016 **CHI 2016** · Student Volunteer

- Volunteered at PC Meeting and at conference

invited panels & talks

DEI Panel

June 2024 Creativity & Cognition Conference · *Host: Rocio von Jungendorf*

Artistic Vision: Interactive Computational Guidance for Developing Expertise

April 2024 Boston University: Department of Education and Computing & Data Sciences · *Host: Beth Warren*
April 2024 National University of Singapore: School of Computing · *Host: Yi-Chieh Lee*
April 2024 University of Southern California: Department of Computer Science · *Host: Souti Chattopadhyay*
March 2024 Indiana University: Department of Human-Centered Computing · *Host: Ming Jiang*
March 2024 Cornell University: Department of Information Science · *Host: Malte Jung*
March 2024 University of Virginia: Department of Computer Science · *Host: Seongkook Heo*
March 2024 Tufts University: Department of Computer Science · *Host: Diane Souvaine & Rob Jacob*
March 2024 Oregon State University: School of Electrical Engineering and Computer Science · *Host: Mike Rosulek*
February 2024 Stevens Institute of Technology: Department of Computer Science · *Host: Mark Ho*
February 2024 University of Wisconsin-Madison: Department of Computer Science · *Host: Yea-Seul Kim*

Artistic Vision: Providing Contextual Guidance for Creative Tasks

July 2023 University of Washington: DUB Seminar · *Host: James Fogarty*
June 2023 Tsinghua University: CS HCI Seminar · *Hosts: Chun Yu & Shi Yuanchun*
June 2023 Fudan University: EDA AI & Math Seminar · *Host: Yingzhou Li*
June 2023 University of California, Irvine: Informatics Special Talk Series · *Host: Stacy Branham*
May 2023 University of California, Berkeley: Berkeley Institute of Design Seminar · *Host: Jeremy Warner*
April 2023 University of Texas, Austin: HCI Seminar · *Host: Amy Pavel*
April 2023 University of California, San Diego: CSE 191 Interactive Computing Seminar · *Host: Mai ElSherief*

Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions

Dec 2020 Adobe: Tech Talk · *Hosts: Marc Levoy & Cecilia Zhang*
Nov 2020 Stanford University: CS547 Seminar on People, Computers, and Design · *Host: Michael Bernstein*
June 2020 University of Toronto: Dynamic Graphics Project Lab · *Hosts: Tovi Grossman & Fanny Chevalier*

Adaptive Photographic Composition Guidance

April 2020 Adobe Research: HCI & Vis Seminar, Adobe @CHI · *Host: Joy Kim*

Design and Higher Education Panel

November 2018 Artful Design Manifestation · *Host: Ge Wang*

teaching experience

Fall 2023 **UCSD COGS120 / CSE170: Interaction Design** · Instructor

- Conceptually-focused introduction to human computer interaction with 200+ students
- Iterated on lecture topics and course assignments (including introducing a team project)
- Invited guest speakers to lecture on topics based on class interest
- Attended discussion sections to provide feedback on student projects

UCSD Guest Lectures

May 2023	DSGN1: Design of Everyday Things · <i>Instructor: Jim Hollan</i>
March 2023	COGS1: Introduction to Cognitive Science · <i>Instructor: Mary Boyle</i>
Oct 2022	COGS120 / CSE170 & DSGN 118: Design for Creativity and Productivity · <i>Instructor: Haijun Xia</i>
Oct 2021	COGS120 / CSE170: Interaction Design · <i>Instructor: Haijun Xia</i>

Summer 2016

Stanford Center at Peking University:

Designing Solutions to Global Grand Challenges · Teaching Assistant

Instructors: James Landay & Ge Wang

- Sole TA for four-week intensive program with students from Stanford and Beijing
- Reviewed applications, managed course logistics, mentored student team projects
- Arranged company and lab visits (in Beijing and Bay Area) and organized final presentations both at the Stanford Center at Peking University and at Stanford d.school

Spring 2016

Stanford CS107E: Computer Systems from the Ground Up · Teaching Assistant

Instructors: Pat Hanrahan, Philip Levis & Dawson Engler

- Revised assignments, helped run labs, held office hours, graded assignments and final projects

peer review

CHI · 2025 [AC], 2024*, 2023*, 2022 [AC], 2021, 2019, 2018

UIST · 2023* [AC], 2022* [AC], 2021 [AC], 2020, 2019

DIS · 2023

C&C · 2023

SIGGRAPH · 2022

GI · 2020

HRI · 2020, 2018

RA-L / ICRA · 2017

* Recognition for outstanding / highly useful review

graduate mentees (non-advisees)

Jude Rayan [UCSD CogSci PhD | ProtoLab]

Xiaotong (Tone) Xu [UCSD CogSci PhD | ProtoLab]

Matin Yarmand [UCSD CSE PhD | HXI Lab] · ETH Zurich Intern

Matthew Beaudouin-Lafon [UCSD CogSci PhD | Creativity Lab] · Adobe Research Intern

Yining (Rima) Cao [UCSD CogSci PhD | Creativity Lab] · Adobe Research Intern

Sharvari Thippanna [UCSD CSE Masters] · Software Engineer at Amazon

Parastoo Abtahi [Stanford CS PhD] · Meta Reality Labs Visiting Research Scientist · Princeton University Assistant Professor

Cheng-Yao (Eric) Wang [National Taiwan University CS Masters] · Cornell Information Science PhD

undergraduate & high school mentees

Brendan Mah [UCSD CSE]

Sarah Luo [Purdue CS]

Mengyi (Crystal) Chen [UCSD CogSci] · UPenn Integrated Product Design Masters

Hyoungwook Jin [KAIST CS | KIXLAB] · KAIST CS Masters

Mingyi Li [UCSD CSE] · Microsoft Research Undergraduate Intern · CSE Undergrad Research Award · Northeastern CS PhD

Grace Lin [UCSD CogSci] · Deloitte UX/AI/VR Design Analyst

Isabelle Pan [UCSD CogSci] · Dora Head of Community

Heidi Chen [Stanford CS] · Google Software Engineer

Punya Chatterjee [Stanford CS] · Apple Design Prototyper

Ilene E [WWPHSS High School] · Adobe Research Women-In-Tech Scholar · Schwarzman Scholar · Ubisoft Research Engineer

Kevin Zhai [Stanford Art] · AirLabs, Inc. Software Engineer · freelance Film Director & Editor

references

James Landay · Stanford
landay@cs.stanford.edu

Haijun Xia · UCSD
haijunxia@ucsd.edu

Pat Hanrahan · Stanford
hanrahan@cs.stanford.edu

Steven Dow · UCSD
spdown@ucsd.edu

Ge Wang · Stanford
ge@ccrma.stanford.edu

Jim Hollan · UCSD
hollan@ucsd.edu

