

# jane l. e

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

## publications

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

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

## service to profession

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

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 “Rini” 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



