

jane l. e

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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

- Fall 2024
Stanford **Ethics & Society Review** · Coordinating Panelist
- Ethical reflection process for reviewing Stanford HAI seed grant proposals
- 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
- 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
- Reviewed PhD applications and participated in committee-wide admissions meetings
- 2017 – 2018
Stanford **Stanford HCI Group Lunch** · Co-Organizer
- 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
- Organized dinner and events for Graphics & HCI PhD admits
- 2014 – 2016
Stanford **Common Origins Dance Company** · Publicity Officer
- Designed company gear and publicity materials for workshops and events
- 2012 – 2014
Microsoft **Princeton Career Fair** · Alumni Recruiter at Microsoft Booth
- 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
- Organized mixers and events for recent graduates and interns
 - Featured on the Daily Princetonian and Alumni Association of Princeton University
- 2008 – 2012
Princeton **Triple 8 Dance Company** · President, Costume Coordinator
- 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
- Graduate Student Symposium Co-Chair (with Steven Dow, UCSD and Lydia Chilton, Columbia)
- 2025 **UIST 2025** · Associate Chair
- 2024 – 2025 **CHI 2025** · Associate Chair, Student Design Competition Reviewer & Judge
- Subcommittee: Blending Interaction: Engineering Interactive Systems & Tools
- 2023 – 2024 **Creativity & Cognition 2024** · Organizing Committee, Session Chair, DEI Panelist
- 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
- 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
- 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
- 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

- January 2025 **Considering Artistic Vision in Smart Glasses**
NUS: The 3rd Bootcamp of Future Interaction for Smart Glasses · *Host: Nuwan Janaka*
- October 2024 **When to Give Feedback: Exploring Tradeoffs in the Timing of Design Feedback**
University of Toronto: Dynamic Graphics Project Lab · *Host: Sangho Suh*
- June 2024 **DEI Panel**
Creativity & Cognition Conference · *Host: Rocio von Jungenfeld*
- April 2024 **Artistic Vision: Interactive Computational Guidance for Developing Expertise**
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*
- July 2023 **Artistic Vision: Providing Contextual Guidance for Creative Tasks**
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*
- December 2020 **Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions**
Adobe: Tech Talk · *Hosts: Marc Levoy & Cecilia Zhang*
- November 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*

November 2018 **Design and Higher Education Panel**
Artful Design Manifestival · *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

March 2025 DSGN1: Design of Everyday Things · *Instructor: Jim Hollan*

May 2023 COGS1: Introduction to Cognitive Science · *Instructor: Mary Boyle*

March 2023 COGS120 / CSE170 & DSGN 118: Design for Creativity and Productivity · *Instructor: Haijun Xia*

October 2022 COGS120 / CSE170: Interaction Design · *Instructor: Haijun Xia*

October 2021

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

Fall 2015 **Stanford CS147: Introduction to Human-Computer Interaction Design** · Head Teaching Assistant

Instructor: James Landay

- Ran weekly studios and TA meetings, managed course logistics, held office hours, graded exams and assignments, proctored exam, organized final presentations at Stanford d.school
- Awarded additional stipend for effective performance as head TA of a 200+ student class

peer review

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

UIST · 2025 [AC], 2023* [AC], 2022* [AC], 2021 [AC], 2020, 2019

DIS · 2023, 2025

C&C · 2023

SIGGRAPH · 2022, 2025

GI · 2020

HRI · 2020, 2018

RA-L / ICRA · 2017

* Recognition for outstanding / highly useful review

graduate mentees (non-advisees)

Fuling Sun [UCSD CogSci PhD | Foundation Interface Lab]

Ritik Batra [Cornell Tech InfoSci PhD | Matter of Tech Lab]

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

Christelle Chantal Millos-Lopez [Stanford CS]
Izabella (Bella) Rodrigues [NYU Gallatin]
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
Michelle Park [Stanford CS] · Rhodes Scholar Finalist · Impact Moonshots Founder
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
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Pat Hanrahan · Stanford
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Ge Wang · Stanford
ge@ccrma.stanford.edu

Haijun Xia · UCSD
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Steven Dow · UCSD
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