

jane l. e

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2025 – present
Singapore **National University of Singapore**
Assistant Professor in Computer Science · Smart Systems Institute

2024 – 2025
Stanford, CA **Stanford University**
Stanford HAI Postdoctoral Fellow
National University of Singapore Adjunct Professor · Smart Systems Institute Affiliate
Mentor · *James Landay*

2021 – 2024
La Jolla, CA **University of California, San Diego**
Design Lab Postdoctoral Fellow in CSE & Cognitive Science
Mentors · *Haijun Xia & Steven Dow*

2014 – 2021
Stanford, CA **Stanford University**
PhD in Computer Science · d.school Creativity in Research Scholar
Advisors · *James Landay & Pat Hanrahan*
Committee · *Maneesh Agrawala, Scott Klemmer & Ge Wang (chair)*
Dissertation · *Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions*

2008 – 2012
Princeton, NJ **Princeton University**
Bachelor of Science in Engineering · cum laude
Advisors · *Thomas Funkhouser & Szymon Rusinkiewicz*
Major · *Computer Science*
Certificate · *Applied & Computational Mathematics*

publications

ASSETS 2025 **Expanding Norms, Negotiating Bodies: How Artists with Disabilities Perceive and Use Creative Tools**
Miriam Brody, Izabella Rodrigues, **Jane L. E** & Jingyi Li.

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**, Zhitian Chen & Haijun Xia. *Best Paper Award*

* Authors contributed equally

✉ Best Paper Award

- UIST 2021 **Dynamic Guidance for Decluttering Photographic Compositions**
Jane L. E., Kevin Zhai, Jose Echevarria, Ohad Fried, Pat Hanrahan & James Landay.
- 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

- CogSci 2025 **Toward Visual Augmentation to Support Creative Uses of Everyday Objects**
Libby Ye, Yujie Tao, Ryan Tan, **Jane L. E.** & Sean Follmer. *Workshop Poster*
- SIGCSE 2023 **Developing Comic-based Learning Toolkits for Teaching Computing to Elementary School Learners**
Francisco Castro, 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. *Doctoral/Guraduate Student 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 E.**
- XRDS 2023 **Machines as Collaborators for Art and Rituals: An Interview with Sougwen Chung**
Jane E., Cathy Fang & Sam Bourgault.

book chapters

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

patents

- 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
San Jose, CA

Adobe Research · Emerging Graphics Group Intern · *Mentor: Jose Echevarria*

- Designed and implemented in-camera adaptive composition guidance interface in iOS

Summer 2017
Redmond, WA

Microsoft Research · Research Intern · *Mentor: Neel Joshi*

- 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
San Francisco, CA

Adobe Research · Creative Technologies Lab Intern · *Mentor: Floraine Berthouzoz*

- Designed and implemented a Unity-based system for previewing and capturing drone shots according to cinematography principles for dialogue scenes

Fall 2012 – 2014
Redmond, WA

Microsoft Corporation · Software Development Engineer

- 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, NJ

Princeton Graphics · Undergrad Researcher · *Advisors: Thomas Funkhouser & Szymon Rusinkiewicz*

- 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
Redmond, WA

Microsoft Corporation · Software Development Engineer Intern

- Developer on Photo Gallery: implemented prototype of color filter search and grouping by image similarity (based on a Microsoft Research library)

Summer 2009 Princeton, NJ	Princeton Summer Programming Experiences · Participant <ul style="list-style-type: none"> 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 Beijing, China	Microsoft Research Asia · High School Research Engineer Intern <ul style="list-style-type: none"> Implemented algorithm to analyze data to differentiate between inline, superscript, and subscript text for the handwritten mathematical formula recognition project

institutional service & leadership

2025 – present	NUS SoC AI Ethics Committee · Member at Large
2024 – present	PhD Admissions Committee · Faculty Committee Member
Fall 2024	Stanford HAI Ethics & Society Review · Coordinating Panelist
2023 – 2024	UCSD Design Lab & CSE Design Lab Impact and Student Culture Organization (DISCO) · Founding Member
Summer 2022 & 2023	Undergrad Summer Research Program · Mentor, Workshop Lead
Fall 2021	Research Meeting · Organizer
Fall 2021	Design & Innovation Building Spaces Committee · Committee Member
Spring 2021	Early Research Scholars Program · Application Reviewer
2020 – 2022	Stanford CS Undergraduate Mentoring Program · Mentor
2017 – 2020	Grace Hopper Conference Career Fair · Student Representative at Stanford Booth
Fall 2020	Student-Application Support Program · Application Reviewer
2018 – 2019	PhD Admissions Committee · Student Committee Member
2016 – 2018	Stanford-Berkeley Women in CS / EE Research Meetup · Co-Organizer & Photographer
2017 – 2018	HCI Group Lunch · Co-Organizer
Spring 2016	PhD Admit Weekend · Research Area Student Lead
2014 – 2016	Common Origins Dance Company · Publicity Officer
2012 – 2014	Princeton Career Fair · Alumni Recruiter at Microsoft Booth
2014	Microsoft at Princeton Hackathon · Co-Organizer
2012 – 2014	Princeton Club of Western Washington · Young Alumni Coordinator
2008 – 2012	Triple 8 Dance Company · President, Costume Coordinator
2011 – 2012	Chinese-American Princeton Siblings · Mentor
2008 – 2010	Bric-A-Brac Yearbook · Section Editor
Summer 2015	Other Girls Who Code · Intern Mentor at Adobe
Fall 2015	Castilleja School Girls Hackathon · Design & Tech Mentor
2005 – 2008	WWP High School South Yearbook · Editor-in-Chief, Section Editor

service to profession

2026	Organizing Committee DIS · Web Chair (with Daniel Buzzo): https://dis.acm.org/2026/
2026	Creativity & Cognition · Graduate Student Symposium Chair (with Steven Dow and Caterina Moruzzi)
2025	Creativity & Cognition · Graduate Student Symposium Chair (with Steven Dow and Lydia Chilton)
2024	Creativity & Cognition · Web Chair (with Grace Yen): http://cc.acm.org/2024/
2023	Creativity & Cognition · Web Chair (with Bradley Rey): http://cc.acm.org/2023/
2022	UIST · Web and Design Chair (with Jasper Tran O'Leary): http://uist.acm.org/uist2022/
2021	UIST · Web and Design Chair (with Toby Li): http://uist.acm.org/uist2021/

Program Committee

- 2026 UIST
2026 DIS · AI & Design
2026 CHI* · Blending Interaction: Engineering Interactive Systems & Tools
2025 UIST***
2025 CHI · Blending Interaction: Engineering Interactive Systems & Tools
2023 UIST*
2022 UIST*
2022 CHI · Interacting with Devices
2021 UIST

Session Chaining

- 2025 Creativity & Cognition · Bodies in the Loop
2024 Creativity & Cognition · Co-Creation
2022 UIST · Storytelling and Presentation
2022 CHI · Creativity Support Tools
2021 UIST · Wrangling Data for Authoring & Analysis

Other

- 2025 CHI · Student Design Competition Reviewer & Judge
2023 XRDS · Summer Issue Co-Guest Editor (with Sam Bourgault) · Computer-Aided Media
2021 Learning@Scale / EMOOCS · ConferenceBuddies Co-Organizer (with Armando Fox)
2019 SIGGRAPH · WiGRAPH Berthouzoz Women in Research Lunch · Design & Photography
2016 CHI · Student Volunteer (PC Meeting and conference)

External Reviewing

- CHI · 2024**, 2023**, 2021, 2019, 2018
UIST · 2020, 2019
DIS · 2025*, 2023
C&C · 2023
SIGGRAPH · 2025, 2022
GI · 2020
HRI · 2020, 2018
RA-L / ICRA · 2017

* Special recognition / highly useful review

invited panels & talks**Considering Artistic Vision in Smart Glasses**

January 2025 NUS: The 3rd Bootcamp of Future Interaction for Smart Glasses · Host: Nuwan Janaka

When to Give Feedback: Exploring Tradeoffs in the Timing of Design Feedback

October 2024 University of Toronto: Dynamic Graphics Project Lab · Host: Sangho Suh

DEI Panel

June 2024 Creativity & Cognition Conference · Host: Rocio von Jungenfeld

Artistic Vision: Interactive Computational Guidance for Developing Expertise

November 2025 NUS Computing AI-X: Industry Day

- May 2025 SUTD: Human-Centered AI and the Future of Smart Cities Roundtable · Host: Yow Wei Quin
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: <i>Mark Ho</i>
February 2024	University of Wisconsin-Madison: Department of Computer Science · Host: <i>Yea-Seul Kim</i>
Artistic Vision: Providing Contextual Guidance for Creative Tasks	
July 2023	University of Washington: DUB Seminar · Host: <i>James Fogarty</i>
June 2023	Tsinghua University: CS HCI Seminar · Hosts: <i>Chun Yu & Shi Yuanchun</i>
June 2023	Fudan University: EDA AI & Math Seminar · Host: <i>Yingzhou Li</i>
June 2023	University of California, Irvine: Informatics Special Talk Series · Host: <i>Stacy Branham</i>
May 2023	University of California, Berkeley: Berkeley Institute of Design Seminar · Host: <i>Jeremy Warner</i>
April 2023	University of Texas, Austin: HCI Seminar · Host: <i>Amy Pavel</i>
April 2023	University of California, San Diego: CSE 191 Interactive Computing Seminar · Host: <i>Mai ElSherief</i>

December 2020	Artistic Vision: Providing Contextual Guidance for Capture-Time Decisions
November 2020	Adobe: Tech Talk · Hosts: <i>Marc Levoy & Cecilia Zhang</i>
June 2020	Stanford University: CS547 Seminar on People, Computers, and Design · Host: <i>Michael Bernstein</i>
	University of Toronto: Dynamic Graphics Project Lab · Hosts: <i>Tovi Grossman & Fanny Chevalier</i>

April 2020	Adaptive Photographic Composition Guidance
	Adobe Research: HCI & Vis Seminar, Adobe @ CHI · Host: <i>Joy Kim</i>

November 2018	Design and Higher Education Panel
	Artful Design Manifestival · Host: <i>Ge Wang</i>

teaching experience

Spring 2026	NUS CS6206: Advanced Topics in Human-Computer Interaction · Instructor
Fall 2023	UCSD COGS120: Interaction Design · Instructor <ul style="list-style-type: none"> 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
2021, 2022, 2025	Guest Lectures
2023	UCSD COGS120 / CSE170: Interaction Design · <i>Instructor: Hajun Xia</i>
2023	UCSD DSGN1: Design of Everyday Things · <i>Instructor: Jim Hollan</i>
2022	UCSD COGS1: Introduction to Cognitive Science · <i>Instructor: Mary Boyle</i>
	UCSD DSGN118: Design for Creativity and Productivity · <i>Instructor: Hajun Xia</i>
Summer 2016	Stanford Center at Peking University: Designing Solutions to Global Grand Challenges · Teaching Assistant <i>Instructors: James Landay & Ge Wang</i> <ul style="list-style-type: none"> 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 <i>Instructors: Pat Hanrahan, Philip Levis & Dawson Engler</i> <ul style="list-style-type: none"> 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 <i>Instructor: James Landay</i> <ul style="list-style-type: none"> 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

mentoring

Graduate Advisees

Zifei (FeiFei) Han [incoming NUS CS PhD]
Izabella (Bella) Rodrigues [incoming NUS CS PhD]
Bekzat Tilekbay [KAIST CS PhD | coadvised with Juho Kim]

Graduate Non-Advisees

Grace Wang [Stanford CS PhD | IxD Lab]
Xiyuan Wang [ShanghaiTech University CS Masters | ViSeer Lab]
Yujie Tao [Stanford CS PhD | SHAPE Lab]
Andrea Green [Stanford CEE PhD | Billington Lab]
Elizabeth Childs [Stanford MechE PhD | IxD Lab]
Peinuan Qin [NUS CS PhD | AI4SG Lab]
Danilo Symonette [Stanford CS PhD | IxD Lab]
Julia Markel [Stanford CS PhD | IxD Lab]
Shardul Sapkota [Stanford CS PhD | IxD Lab]
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] · Assistant Professor at UNC Charlotte
Matthew Beaudouin-Lafon [UCSD CogSci PhD | Foundation Interface Lab]
Yining (Rima) Cao [UCSD CogSci PhD | Foundation Interface Lab]
Sharvari Thippanna [UCSD CSE Masters] · Software Engineer at Amazon
Cheng-Yao (Eric) Wang [National Taiwan University CS Masters] · Cornell IS PhD · Research Scientist at JPMC

Undergraduate & High School Mentees

Melvin Alvarez [Stanford MechE | SSFP]
Savannah Voth [Stanford English + CS | CURIS]
Gabriella Ugwonali [Stanford Math + CS | CURIS]
Christelle Millos-Lopez [Stanford CS]
Miriam Brody [Pomona CS | Doodle Lab]
Izabella (Bella) Rodrigues [NYU Gallatin] · incoming NUS CS PhD
Brendan Mah [UCSD CSE] · Co-Founder of AI Blocks
Sarah Luo [Purdue CS] · Software Engineer Intern at Google
Mengyi (Hazel) Chen [UCSD CogSci] · UPenn Integrated Product Design Masters
Hyoungwook Jin [KAIST CS | KIXLAB] · KAIST CS Masters · UMich CS PhD
Mingyi Li [UCSD CSE] · Undergraduate Intern at MSR · CSE Undergrad Research Award · Northeastern CS PhD
Grace Lin [UCSD CogSci] · Product Designer at Deloitte
Isabelle Pan [UCSD CogSci] · Head of Community at Dora
Heidi Chen [Stanford CS] · Software Engineer at Google
Punya Chatterjee [Stanford CS] · Design Prototyper at Apple · Freelance Director & Cinematographer
Michelle Park [Stanford CS] · Rhodes Scholar Finalist · Founder & CEO of Impact Moonshots
Ilene E [WWPHSS High School] · Adobe Research Women-In-Tech Scholar · Software Engineer at Watershed
Kevin Zhai [Stanford Art] · Freelance Film Director & Editor · Founding Engineer at Hamilton AI

Thesis Committees

Bai Yunpeng [NUS PhD SoC advised by David Hsu and Shengdong Zhao]
Chen Ju [NUS MComp advised by Yi-Chieh Lee]
Niven Ang Jia Hao [NUS MComp advised by Ye Wang]

references

James Landay · Stanford
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Pat Hanrahan · Stanford
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Ge Wang · Stanford
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Haijun Xia · UCSD
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Steven Dow · UCSD
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Jim Hollan · UCSD
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