Lucy Pei

lucypei3.14@gmail.com

EDUCATION

Ph.D, Informatics

Expected June 2024

University of California, Irvine, Irvine, CA

Member of the Lab for Ubiquitous Computing and Interaction Member of the EVOKE Lab and Studio

GPA: 4.0/4.0

B. A., Global Studies and Human-Computer Interaction

May 2016

Carnegie Mellon University, Pittsburgh, PA

Minor in Business Administration

Honors Thesis: Educating English Language Learners in the Pittsburgh Public Schools

GPA: 4.0/4.0

PEER-REVIEWED PUBLICATIONS

Benedict Salazar Olgado* and **Lucy Pei***. 2022. Stewarding the Documental Afterlives of Refugee Tech Initiatives. Proceedings of the ACM on Human-Computer Interaction, 8(CSCW). Association for Computing Machinery, New York, NY, USA *Both authors contributed equally to this paper

Christie Abel, **Lucy Pei**, Ian Larson, Benedict Salazar Olgado, and Benedict J. Turner. 2022. "Tinder Will Know You Are A 6": Users' Perceptions of Algorithms on Tinder. In Proceedings of the Annual Hawaii International Conference on System Sciences (HICSS'22). IEEE.

Philip Garrison* and **Lucy Pei***. 2022. Deferring Social Impact: Conceptions of ICTD and Computing Careers. In Proceedings of the Annual Hawaii International Conference on System Sciences (HICSS'22). IEEE.

*Both authors contributed equally to this paper

Lucy Pei*, Benedict Salazar Olgado*, and Roderic Crooks. 2021. Market, Testbed, Backroom: The Redacted Internet of Facebook's Discover. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI '21). Association for Computing Machinery, New York, NY, USA

*Both authors contributed equally to this paper

Lucy Pei and Roderic Crooks. 2020. Attenuated Access: Accounting for Startup, Maintenance, and Affective Costs in Resource-Constrained Communities. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20). ACM, New York, NY, USA.

Benedict Salazar Olgado, **Lucy Pei**, and Roderic Crooks. 2020. Determining the Casting Mold of Intimate Platforms through Document Theory. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20). ACM, New York, NY, USA.

Best Paper Honorable Mention, in top 5% of papers

Lucy Pei and Bonnie Nardi. 2019. We Did It Right, But It Was Still Wrong: Toward Assets-Based Design. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19). ACM, New York, NY, USA.

OTHER PUBLICATIONS

Akwugo Emejulu, **Lucy Pei**, and Aakash Gautam. 2022. Critical perspectives on ABCD: a conversation with Akwugo Emejulu. interactions 29, 5 (September - October 2022), 34–38. https://doi.org/10.1145/3550063

Lucy Pei, Marisol Wong-Villacres, Sheena Erete, Daniela Rosner, Alex Taylor, and Mikael Wiberg. 2022. Who we are and what we have: designing with minoritized communities. interactions 29, 5 (September - October 2022), 5. https://doi.org/10.1145/3557984

Marisol Wong-Villacres, Sheena Erete, Aakash Gautam, Azra Ismail, Neha Kumar, **Lucy Pei**, Wendy Roldan, Veronica Ahumada-Newhart, Karla Badillo-Urquiola, J. Maya Hernandez, Anthony Poon, Pedro Reynolds-Cuéllar, and Vivian Genaro Motti. 2022. Elevating strengths and capacities: the different shades of assets-based design in HCI. interactions 29, 5 (September - October 2022), 28–33. https://doi.org/10.1145/3549068

Lucy Pei, Edgard David Rincón Quijano, Angela D. R. Smith, Reem Talhouk, and Frederick van Amstel. 2022. Assets and community engagement: a roundtable with HCI researchers and designers. interactions 29, 5 (September - October 2022), 44–47. https://doi.org/10.1145/3554975

Lucy Pei. 2021. "Information Technology," in *The Annual Register*, 2021, Vol 263. Ed. D.S. Lewis. Proquest.

EDITORIAL WORK

Lead guest editor on Special Issue of ACM's *Interactions* Magazine.

Lucy Pei, Marisol Wong-Villacres, Sheena Erete, guest editors. *Designing with Community Strengths and Assets*. ACM Interactions Magazine, Sept/Oct 2022.Volume XXIX.5

RESEARCH EXPERIENCE

Institute for Money, Technology, and Financial Inclusion, Irvine, CA

September 2019-June 2020

Graduate Student Facilitator

- Created syllabus for undergraduates in computer science to gain awareness and reflect about the role of computing in the social
- Guided undergraduate researchers to collect data about and analyze community organizations that use data to engage with policy issues

Greater Pittsburgh Literacy Council, Pittsburgh, PA **Independent Researcher**

January 2017-June 2018

- Integrated Internet technologies with English as a Second Language (ESL) curriculum by making class content accessible for online practice
- Collected data on students' mobile phone usage through participant observation, verbal surveys, and interviews
- Designed and facilitated classes on mobile phone usage, teaching basic phone use skills, security practices, and related English vocabulary

Carnegie Mellon University, Pittsburgh, PA January 2016 – May 2016 **HCI Capstone Consultant**

• Designed and user-tested online course to teach collaboration using a variety of online and offline interaction techniques

Dietrich College, Pittsburgh, PA **Honors Fellow**

May 2015 - May 2016

- Developed bibliography and reviewed relevant literature
- Conducted ethnographic participant observation in ESL classroom twice a week for two semesters in a public high school
- Conducted interviews with stakeholders at multiple levels
- Promoted and published research through blog posts and social media

Human Computer Interaction Institute, Pittsburgh, PA September 2014 – December 2015

Research Assistant

- Designed classroom observation protocol to collect data on student participation in computer science recitations taught by international teaching assistants
- Recorded and categorized classroom participation patterns weekly for one semester
- Tested Wizard of Oz prototype with teaching assistants for one semester and collected data to assess how much prototypes increased student participation
- Conducted interviews on usability of infographics and analytical tools for teachers
- Transcribed, annotated, and coded eight hours of interviews

Learning Research and Development Center, Pittsburgh, PA Research Assistant

May 2015

- Conducted assessment interviews with around 20 ESL students
- Scored, entered, and organized data for analysis using Excel

TechBridgeWorld, Field Robotics Center, Pittsburgh, PA January 2014 – August 2014 **Undergraduate Research Fellow**

- Designed and implemented user tests using surveys, interviews, focus groups, observations, and experimental design
- Interacted with special needs populations including blind/visually impaired, deaf and hard of hearing, and people who spoke minimal English
- Coded interviews and observations, conducted statistical analysis
- Wrote reports, recommendations, and design guidelines
- Organized, publicized, and created content for event attended by over 400 people
- Created project website

PRESENTATIONS

Just Tech Transitions Workshop: "Ethical Imaginaries and Sociotechnical Systems Against Labor Exploitation in Venezuelan Migration"

Virtual, August 2022

Dialogues in Data Power: "Living Proof: Data Practices of Community Organizers"

Bremen, Germany, June 2022

CHI 2021: "Market, Testbed, Backroom: The Redacted Internet of Facebook's Discover"
Virtual, May 2021

4S 2020: "Politics, Pathos, and Power: Community Mobilizations of Data"

Virtual, August 2020

HCI4D @ Third Space: "Attenuated Access: Accounting for Startup, Maintenance, and Affective Costs in Resource-Constrained Communities" Virtual, July 2020

CHI 2019: "We Did It Right, But It Was Still Wrong: Toward Assets-Based Design"
Glasgow, Scotland, May 2019

Dietrich Under Construction Workshop: Alumna Panelist

Pittsburgh, USA, November 2017

Phi Beta Kappa Early Initiation Ceremony: Invited Keynote Speaker

Pittsburgh, USA, November 2016

Carnegie Mellon's Meeting of the Minds: "Educating English Language Learners in the Pittsburgh Public Schools"

Pittsburgh, USA, May 2016

Carnegie Mellon's Meeting of the Minds: "Motivational Appeal of Extrinsically Integrated Educational Games for English Literacy with Underserved Populations"

Pittsburgh, USA, May 2015

POSTERS

Lucy Pei, Benedict Salazar Olgado, and Roderic Crooks. 2022. Narrativity, Audience, Legitimacy: Data Practices of Community Organizers. In CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI '22 Extended Abstracts), April 29-May 5, 2022, New Orleans, LA, USA. ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3491101.3519673

WORKSHOPS & PANELS ORGANIZED

Lucy Pei, Philip Garrison, and Yvette Iribe Ramirez. "Toward reunion: Conversations, criticisms, reconfigurations of ICTD". Meeting of the Society of Social Studies of Science (4S), 2022, Cholula, Mexico.

Christine Kim, Orlando Lara, **Lucy Pei**, Farah Qureshi, and David Theo Goldberg. "Exploring The Infopolitics Of Algorithmic Knowledge Production, Community Formation, And Governance." Annual Meeting of the American Anthropological Association (AAA), 2022, Seattle, Washington, USA.

Marisol Wong-Villacres, Aakash Gautam, Wendy Roldan, **Lucy Pei**, Jessa Dickinson, Azra Ismail, Betsy DiSalvo, Neha Kumar, Tammy Clegg, Sheena Erete, Emily Roden, Nithya Sambasivan, and Jason Yip. 2020. From Needs to Strengths: Operationalizing an Assets-Based Design of Technology. In Conference Companion Publication of the 2020 on Computer Supported Cooperative Work and Social Computing (CSCW '20 Companion). Association for Computing Machinery, New York, NY, USA, 527–535.

DOI: https://doi.org/10.1145/3406865.3418594 (Virtual workshop)

FELLOWSHIPS & GRANTS

NSF Doctoral Dissertation Research Improvement Grant February 2023

Achievement Rewards for College Scientists (ARCS) Scholar Award Sept 2022

Steckler Center for Responsible, Ethical, and Accessible Technology (CREATE) Summer Fellow
June 2021- September 2021

NSF Graduate Research Fellow Oct 2020-Oct 2023

Zonta International Women in Technology Scholarship, District and International Levels

December 2019

Zonta International Women in Technology Scholarship, Chapter Level August 2019

UCI Informatics Chair's Award September 2018

Dietrich Honors Fellowship May 2015 – August 2015

Small Undergraduate Research Fellowship May 2014 – August 2014

Carnegie Scholarship August 2012 – May 2016

HONORS & AWARDS

Eugene D. Levy Award for Most Outstanding Graduate, Department of History May, 2016

Senior Leadership Award May 2016

University and College Honors May 2016

Phi Beta Kappa Honors Society (early election)

January 2016

Dean's List

December 2012 - May 2016

TEACHING EXPERIENCE

Stanford - Digital Civil Society

Guest Lecture: "People's Community Control of Modern Technology": Community Organizers and Data Justice (With Roderic Crooks and Benedict Salazar Olgado)

Spring 2021

UC Irvine - Internet, Technology, and Society Guest Lecture: "Raw Data is an Oxymoron"

Spring 2020

UC Irvine - Multiplayer Project Teaching Assistant, with Kurt Squire

Spring 2019

UC Irvine - Human Factors and the Web Teaching Assistant, with Shri Jambhekar

Winter 2019

UC Irvine - Global Disruption and Information Technology Teaching Assistant, with Bill Tomlinson

Fall 2018

EMPLOYMENT HISTORY

TiER1 Performance Solutions, Pittsburgh, PA **Learning Consultant and Research Analyst**

June 2016 – July 2018

- Contributed on a team of three proposal writers to win a Phase 1 Small Business Innovation Research (SBIR) grant on innovative training
- Led user testing of a training and competency management system prototype with 10 participants
- Designed interactions and generated wireframes and interfaces for digital products such as a competency management system, a web app for a clinical preceptorship program, and software to integrate cognitive models
- Presented to clients and interviewed subject matter experts
- Designed and storyboarded e-learning courses for corporate clients' training needs in areas such as onboarding, compliance, and performance management
- Created instructor-led training materials for rollouts of enterprise software systems

Carnegie Mellon Academic Development, Pittsburgh, PA May 2013 – December 2015 **Peer Tutor**

• Tutored peers at CMU in introductory computer science and multivariate calculus with individual appointments and walk-in sessions

?WhatIf! Innovation Partners, New York, NY **Intern**

June 2012 – August 2012

- Conducted research regarding formats, implementations, and results presentations of company-wise diagnostics tools
- Researched Six Sigma and other competitors in the market for transforming organizational culture

SKILLS

Languages

Mandarin Chinese (fluent speaking and listening, intermediate reading and writing) Spanish (advanced speaking and listening, advanced reading and writing)

Human-Computer Interaction

Usability Testing and Experimental Design Rapid Prototyping and Wireframing Contextual Inquiry Storyboarding

Technical

Basic HTML, CSS, and Python Adobe Suite

Other

Instructional Design

PROFESSIONAL SERVICE

Journal and Conference Review

Journals

New Media & Society 2020, 2021

Conferences

Conference on Human Factors in Computing Systems (CHI) 2020, 2021, 2022, 2023

Conference on Computer Supported Collaborative Work (CSCW) 2022

COMMUNITY ENGAGEMENT AND LEADERSHIP

Informatics Graduate Student Association Social Chair, Communications Chair

October 2018-October 2020

• Organized biweekly social events to promote connection and professional development among Informatics graduate students in the department

Counterpoint (All-femme a cappella group)

September 2012 - May 2016

President, PR Chair, and Member

 Auditioned over 60 potential members, coordinated rehearsals, managed repertoire, and organized and promoted concerts, including a benefit concert that was attended by over 600 people, raising over \$3000

FORGE

September 2014 - May 2016

Resettlement Mentor, Camp Counselor

• Assisted Bhutanese refugees with English and life skills, designed and led creative lessons for refugee youth summer camp

Ed Tech Club

October 2014 – May 2016

Member

 Aided in coordination of education technology related events and resources in the university and local communities

STRIVE for College

September 2012 – May 2014

Executive Board Member

 Organized volunteers to assist underserved high school students in college applications, college visits, and SAT preparation

Viva Nicaragua

June 2013 – July 2013

Project Leader

• Taught crafts to 20 local women, created a basic business plan for the women to sell their crafts, collaborated with community, non-profits, local businesses, and government organizations, all using Spanish