

KEKE WU

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EDUCATION

- 2024 **Ph.D. in Computer Science**
University of North Carolina at Chapel Hill
Committee Members: Gary Bishop, Stan Abalt, Shea Tanis, David Gotz, and Danielle Albers Szafir (chair)
- 2019 **M.S. in Creative Technology & Design**
University of Colorado Boulder
Thesis: Designing Visualization for Communication
- 2017 **M.F.A. in Film & Television Production**
Communication University of China
Project (Documentary): "From LA to the BEI"
- 2016 **Visiting Student in Visual Arts**
Frostburg State University
- 2015 **B.A. (minor) in Japanese Language & Literature**
Wuhan University
Thesis: Female Characters in Studio Ghibli Movies
- 2015 **B.Eng. in Digital Media Technology**
Central China Normal University
Project (Documentary): "A Bite of the Spring Festival"

PUBLICATIONS

Conference & Journal Articles

1. **K. Wu**, G. Quadri, Z. Wang, D. Osei-Tutu, E. Peterson, V. Koushik, and D. A. Szafir, 2024. Hear Our Voices: Co-designing Data Visualizations with People with Intellectual and Developmental Disabilities. *Under Review at ASSETS'24*.
2. B. Wimer, L. South, **K. Wu**, D. A. Szafir, M. Borkin and R. Metoyer, 2023. Beyond Vision Impairments: Redefining the Scope of Accessible Data Representations. *Accepted by IEEE TVCG*.
3. **K. Wu**, M. Tran, E. Petersen, V. Koushik, and D.A. Szafir, 2023. Data, Data, Everywhere: Uncovering Everyday Data Experiences for People with Intellectual and Developmental Disabilities. *In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI'23)*.
4. 🏆 **K. Wu**, E. Petersen, T. Ahmad, D. Burlinson, E.S. Tanis, and D.A. Szafir, 2021. Understanding Data Accessibility for People with Intellectual and Developmental Disabilities. *In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI'21)*. **Best Paper Award**

5. S. Smart, **K. Wu** and D. A. Szafr, 2019. Color Crafting: Automating the Construction of Designer Quality Color Ramps. In *IEEE Transactions on Visualization and Computer Graphics (TVCG VIS'19)*.
6. M. Whitlock, **K. Wu** and D. A. Szafr, 2019. Designing for Mobile and Immersive Visual Analytics in the Field. In *IEEE Transactions on Visualization and Computer Graphics (TVCG VIS'19)*.

Workshop Papers, Posters & Invited Essays

7. **K. Wu**, and D.A. Szafr, 2023. Empowering People with Intellectual and Developmental Disabilities through Cognitively Accessible Visualizations. (Position Paper) *Visualization for Social Good Workshop (Vis4Good'23)*.
8. **K. Wu**, 2021. Towards A Universal Cognitive Tool: Designing Accessible Visualization for People with Intellectual and Developmental Disabilities. (Invited Article) *SIGACCESS Access. Comput., 131, Article 1*.
9. **K. Wu**, E. Petersen, T. Ahmad, D. Burlinson, E.S. Tanis, and D.A. Szafr, 2021. Understanding Data Accessibility for People with Intellectual and Developmental Disabilities. (Poster) *AUCD Annual Meeting 2021*.
10. **K. Wu**, E.S. Tanis, and D.A. Szafr, 2019. Designing Communicative Visualization for People with Intellectual Developmental Disabilities. (Position Paper) *Visualization for Communication Workshop (VisComm'19)*.
11. E.S. Tanis, D.A. Szafr, and **K. Wu**, 2019. Accessible Data: Understanding Visualization and Graphical Perception of People with IDD. (Poster) *AAIDD Annual Meeting 2019*.
12. **K. Wu** and P. Herzfeld, 2017. Hap App: A Mobile Design for Depression. (Poster) *the 2nd Symposium on Computing and Mental Health at CHI'17*.

Non-Academic Works

13. **K. Wu** and K. Kali, 2016. Documentary: 'From LA to the BEI'. *Screened at USC & CUC*.
14.  **K. Wu**, J. Bai and J. Liang, 2014. Short Film: 'In the Name of Life'. *Screened at the 3rd Cherry Blossom Film Festival. Silver Award*

AWARDS & HONORS

2023 Doctoral Consortium Award, ACM CHI
 2023 Collegiate Award Finalist, NCWIT
 2021 Best Paper Award, ACM CHI
 2021 Adobe Research Fellowship Finalist
 2021 Ray Hauser Award, CU Graduate School
 2019 ATLAS Graduate Travel Grant, CU ATLAS Institute
 2019 Dean's Match Travel Grant, CU College of Engineering & Applied Science
 2018 Humanitarian Silver Award, T9Hacks
 2014 Silver Award, Cherry Blossom Film Festival

Dancing Across Boundaries of Computing Education

2021 - NOW Examines ways to integrate machine learning, data science, and physical computing in the context of dance and cheerleading
Co-PIs: Kayla DesPortes, Kathleen McDermott, Yoav Bergner, Willie Payne, Ben Shapiro, Edd Taylor, and Danielle Albers Szafir

Designing Accessible Visualizations for People with IDD

2018 - NOW Organized participatory design workshops to understand the data sensemaking and visualization authoring processes of people with IDD
Used semi-structured interviews to uncover their everyday data experiences
Conducted mixed-methods experiments to investigate how they read common visualizations
Co-PIs: Emma Petersen, Varsha Koushik, Michelle Tran, Shea Tania, and Danielle Albers Szafir

Color Crafting: Data-Driven Automation of Color Encodings for Visualization

2018 - 2019 Evaluated auto-generated color ramps on MTurk
Collected aesthetically pleasing color palettes made by designers
Co-PIs: Stephen Smart, Danielle Albers Szafir

FieldView: Mobile and Immersive Visual Analytics in the Field

2017 - 2019 Designed & developed a mobile app for field data collection
Conducted semi-structured interviews with field experts to gather their needs for situated analysis
Co-PIs: Matt Whitlock, Danielle Albers Szafir

Happy Ivy: A Mobile Design for Bipolar Disorder

2017 - 2018 Designed & developed a mobile app for people with bipolar disorder

Hap App: A Mobile Design for Depression

2016 - 2017 Designed a mobile app for people with depression
Featured a virtual cartoon guide and multiple functionalities aimed at providing a range of therapeutic experiences
Co-PIs: Pete Herzfeld

Global City Symphony Documentary Workshop

2016 Made a documentary with a student from USC
Explored an African American individual's quest for identity and his beliefs and attitudes towards marriage, parenting, and entrepreneurship in Beijing, China
Co-Directors: Kelley Kali

University of Colorado Boulder

- SPRING 2022 YOU'RE @ CU Research Program, Graduate Mentor
FALL 2020 ATLAS2100: Image, Teaching Assistant for Prof. Sheiva Rezvani
SPRING 2020 INFO1121: Designing Interactions, Teaching Assistant for Prof. Laura Devendorf

Frostburg State University

- SPRING 2017 ART414: Interactive Multimedia Design, Course Assistant for Prof. Pete Herzfeld

Communication University of China

- SPRING 2016 3D Animation Previz, Course Assistant for Prof. Gedong Zhang

PRESENTATIONS & INVITED TALKS

- 2023 **Dagstuhl Seminar:** Inclusive Data Visualization
2022 **Grace Hopper Celebration:** Award Winning Research in HCI
Methods@Manchester: Designing Accessible Visualization for People with IDD
DVS Fireside Chat: Charts in Context
R-Ladies Event: Accessible Data Visualization
2021 **GAMES Webinar:** Understanding Data Accessibility for People with IDD
ANCOR Understanding Data Accessibility for People with IDD
2019 **Coleman Conference:** Towards Accessible and Inclusive Visualization Design

SERVICE

Reviewing

- 2024 DIS
2023 TOCHI
2022 IEEE VIS
2021 IEEE VIS, EuroVis
2020 IEEE VIS, PacificVis

Volunteering

- 2020 - 2023 IEEE VIS
2017, 2021 ACM CHI
2017 NYC Food Bank
2016 Queen City Film Festival, MD

Organizing

- 2024 **Accessible Data Visualization Workshop**, IEEE VIS Workshop
Co-organizers: Md Naimul Hoque, Pramod Chundury, Jonathan Lazar, Frank Elavsky, Dominik Moritz, Danielle Albers Szafir, Lucas Gil Nadolskis, Brianna Wimer, Laura South, Niklas Elmqvist.
- 2023 **IEEE VIS Organizing Committee**, Student Volunteers Chairs
Co-chairs: Kun-Ting Chen, Katy Williams, Noëlle Rakotondravony, and Vahid Pooryousef.
- 2022 **IEEE VIS Organizing Committee**, Student Volunteers Chairs
Co-chairs: Juan Trelles, Beatrice Gobbo, Kun-Ting Chen, and Chenguang Shine Xu.
- 2021 **Towards Accessible Data Representations**, IEEE VIS Panel
Co-organizers: Arvind Satyanarayan, Danielle Albers Szafir, Crystal Lee, and Alan Lundgard.
Speakers: Cynthia Bennett, Chancey Fleet, Zoe Gross, Ariel Schwartz, and Rua Williams.