

Kylie R. Lin

Doctoral Student, Human-Centered Computing
School of Interactive Computing, Georgia Institute of Technology

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RESEARCH INTERESTS

Information Visualization, Human Cognition, Trust in Automated Systems, Research Methods.

EDUCATION

Atlanta, GA
2023 – Present
Georgia Institute of Technology
Ph.D. in Human-Centered Computing
Advisor: Cindy Xiong Bearfield
GPA: 4.0 / 4.0

Evanston, IL
2019 – 2023
Northwestern University
B.S. in Communication Studies & Cognitive Science
Minor in Data Science | Module in Digital Media
Advisors: David Rapp, Steven Franconeri
magna cum laude, SoC Dean's List (all eligible terms), Lambda Pi Eta Honor Society
GPA: 3.98 / 4.0

RESEARCH EXPERIENCE

Atlanta, GA
2023 – Present
Georgia Institute of Technology
Graduate Student Researcher | VisualizaXiong Lab
Advisor: Cindy Xiong Bearfield
Studying how design choices impact people's perception of data visualizations and metrics to assess people's trust in automated systems.

Los Altos, CA
Winter 2026
Toyota Research Institute
Research Intern | Human-Centered AI Team
Advisor: Laura Libby
Human-subjects-based research on how people interpret and trust presentations of simulated survey data.

Summer 2024
Applied Behavioral Science Research Intern | Human-Centered AI Team
Advisor: Laura Libby
Conducted research on vehicle owners' perceptions of electric vehicle battery degradation, identifying methods to mitigate misunderstanding.

Evanston, IL
2022 – 2023
Northwestern University
Student Researcher | Reading Comprehension Lab
Advisor: David Rapp
Conducted an honors thesis on the impact of visual complexity on people's comprehension of data visualizations and their confidence in their comprehension.

- 2020 – 2023 **Research Assistant | Visual Thinking Lab**
 Advisor: Steven Franconeri
 Conducted research at the intersection of human cognition and data visualization.
 Co-authored a paper on chart alignment impacting human comparisons to IEEE TVCG.
- Spring 2021 **Research Assistant | Social Media Lab**
 Advisor: Jeremy Birnholtz
 Developed a codebook for qualitative survey data using data-driven open coding for a project on how young people disclose sensitive health information online.
- Summer 2022 **SiriusXM**
User Experience Research Intern | Automotive Experience Design Team
 Manager: Katie Bessière
 Developed a framework for competitive benchmarking research. Successfully executed benchmarking studies: Handled the recruitment and live interviewing of 12 participants via UserTesting software.

PUBLICATIONS

CONFERENCE PUBLICATIONS

- Lin, K.**, Guan, H., Rapp, D. N., Xiong Bearfield, C. (2026). A Four-Stage Framework of Visual Complexity and Trust as Mediated by Effort. *Proceedings of the 2026 Pacific Visualization Conference in Sydney, Australia.*
- Lin, K.**, Ru S. S., Chang, M., Xiong Bearfield, C. (2026). beautiVis: An Annotated Visualization Dataset from Reddit's r/dataisbeautiful. *Proceedings of the 2026 Pacific Visualization Conference in Sydney, Australia.*
- Lin, K.**, Stokes, C. & Xiong Bearfield, C. (2025). Write, Rank, or Rate: Comparing Methods for Studying Visualization Affordances. *IEEE Transactions on Visualization and Computer Graphics.*
- Lin, K.**, Li, J., Sparks, J., Filipowicz, A., Shamma, D. & Libby, L. (2025). SOH Illusion: Misunderstandings of EV Battery State of Health and Methods to Promote Understanding. *Proceedings of the 17th International Conference on Automotive User Interfaces and Interactive Vehicular Applications.*
 **Best Paper Honorable Mention (Top 10%)**
- Lin, K.**, Ru, S. S., Rapp, D. N., Guan, H. & Xiong Bearfield, C. (2025). What Makes a Visualization Visually Complex? In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems.*
- Lin, K.**, Stokes, C. & Xiong Bearfield, C. (2025). LLMs Are Not Reliable Human Proxies to Study Affordances in Data Visualizations. *2nd HEAL Workshop at CHI Conference on Human Factors in Computing Systems (HEAL @ CHI 2025).*
- Xiong, C., Setlur, V., Bach, B., **Lin, K.**, Koh, E., Franconeri, S. (2021). Visual Arrangements of Bar Charts Influence Comparisons in Viewer Takeaways. *IEEE Transactions on Visualization and Computer Graphics.*

JOURNAL PUBLICATIONS

Wang, H. W., Cohen, A., Nobre, C., **Lin, K.**, Zwald, Z., Kennedy, R., & Xiong Bearfield, C. [In Submission] Do You “Trust” This Visualization? An Inventory to Measure Trust in Visualizations. *IEEE Transactions on and Computer Graphics*.

POSTERS

Lin, K., Ru, S., Rapp, D., Guan, H., Bearfield, C. X. (2024). What Makes a Visualization Complex? Exploring Design Features Related to Visual Complexity. [Poster session]. *IEEE Visualization and Visual Analytics Conference*.

Lin, K., Rapp, D., Xiong, C. (2023). Does Visual Complexity Impact Reader Comprehension and Confidence of Data Visualizations? [Poster session]. *Psychonomic Society*.

Awad, M. F., **Lin, K.**, & Franconeri, S. L. (2023). Mixed Graph Designs Do Not Improve Visual Memory. *Journal of Vision*, 23(9), 5781-5781.

Lin, K., Rapp, D., Xiong, C. (2023). The Effect of Visual Complexity on Confidence and Comprehension in Visualization Experiences. [Poster session]. *Northwestern Cog Sci Fest*.

Awad, M., **Lin, K.**, & Franconeri, S. (2022). Does using a diversity of graph types help your audience remember your data?. *Journal of Vision*, 22(14), 4279-4279.

Lin, K., Xiong, C., Rapp, D. (2022). Attempts to Augment Refutation Text Benefits with Visualizations. [Poster session]. *Northwestern Undergraduate Research & Arts Exposition*.

Lin, K., Awad, M.F., Franconeri, S. (2022). The Effects of Visual Diversity in Series of Charts. [Poster session]. *Northwestern Cog Sci Fest*.

INVITED TALKS

Atlanta, GA
May 2025 **Conceptualizing Visual Complexity and Trust in Data Visualizations**
CODA AI Synapse, Atlanta, Georgia, USA (hosted by Jitesh Jain)

Schloss Dagstuhl
Oct. 2024 **Quantifying Perceptions of Visual Complexity with Data Visualization Design Features**
Artificial and Human Intelligence, Schloss Dagstuhl, Germany (hosted by Mehul Bhatt)

FELLOWSHIPS & AWARDS

- 2025 Best Paper Honorable Mention (ACM AutoUI 2025)
- 2023 Northwestern Communication Studies Excellence Award for Undergraduate Students
- 2022 MinneAnalytics Scholarship (\$500)
- 2021 2nd Place, Women in Data Science Datathon, Chicago
- 2021 Northwestern Cognitive Science Summer Undergraduate Research Fellowship (\$3500)

- 2021 Northwestern OUR Summer Undergraduate Research Grant (\$3500, awarded but declined)
- 2020 1st Place, Northwestern Data Visualization Contest
*Interactive global map depicting the number of COVID-19 cases over time using RShiny.
Submission published to university archives, see [here](#).*
- 2020 Finalist, McCormick Design-a-Thon
*Conducted market research and created a wireframe for an app promoting safe social interactions
for university students in the time of COVID-19.*
- 2019 Clara Tao Memorial Scholarship (\$1000)
- 2017 National Merit Commended Scholar

INTERNATIONAL VISITING & DEVELOPMENT

- Schloss Dagstuhl **Training Forum on Artificial and Human Intelligence**
- Fall 2024 Host: Mehul Bhatt
Presented an in-progress research project on using visualization design features to model
perceived visual complexity in visualizations.

ACADEMIC SERVICES

CONFERENCE REVIEWER

- 2025 ACM Conference on Human Factors in Computing Systems (CHI)
- 2024 ACM Conference on Human Factors in Computing Systems (CHI)
- 2021 ACM Creativity and Cognition

TEACHING EXPERIENCE

Teaching Assistant

- Fall 2025 Principles of Data Visualization (GATech)
- Spring 2023 Data Science Project (NU)
- 2022 – 2023 Data Visualization (NU)
- Winter 2021 Persuasive Images: Rhetoric in Popular Culture (NU)

Peer Mentor

- Fall 2021 Communication & Technology (NU)

ADDITIONAL PROFESSIONAL EXPERIENCE

Belmont, CA 2021 – 2022	Just One Cookbook Operations Analyst Managers: Shen Chen, Namiko Chen Co-coordinated the launch of an online subscription membership program (JOC Plus) by designing site pages, advertisements, and by helping facilitate a soft launch.
2020 – 2021	Digital Media Intern Conducted research on global site traffic using R/RStudio and Google Search Console.
Evanston, IL 2020 – 2021	North by Northwestern Graphics Editor & Social Media Graphics Coordinator Taught weekly design lessons covering design principles, Adobe CC basics, accessibility design, 3D graphics, and more to undergraduate students.
Remote Summer 2020	Paravane Ventures Market Research & Strategy Case Analyst Analyzed the UX/UI and website of the company Product Alliance and the online market for product management courses.
Evanston, IL Summer 2018	Northwestern-Medill Journalism Institute Student Journalist Residency for U.S. and international students. Included writing, video production, ethics, and digital media.

RELEVANT COURSEWORK

Georgia Institute of Technology

Human-Computer Interaction

Principles of Data Visualization (CS 6730)
Information Visualization (CS 7450)
Human-Centered Data Analysis (CS 7451)
Prototyping Interactive Systems (CS 6452)

Social Computing

Design of Online Communities (CS 6470)

Northwestern University

Data Science & Visualization

Data Science I-III (STAT 301-I, 301-2, 301-3)
Data Visualization (STAT 302)
Information Visualization (COMM ST 395)

Programming

Fundamentals of Computer Programming I-II (CS 111, 211)
Introduction to Artificial Intelligence (CS 348)
Introduction to Cognitive Modeling (COG SCI 207)

Research Methods

Evaluating Evidence (COG SCI 202)
Cognitive Science Proseminar (COG SCI 366)

Research Seminar (COMM ST 394)
Presenting Ideas and Data (COG SCI 345)

SELECT SKILLS

HUMAN-SUBJECTS RESEARCH

Survey studies: Qualtrics, Prolific, Amazon Mechanical Turk

Eye tracking studies: EyeLink 1000 eye tracker

Qualitative data analysis

Thematic analysis
data-driven open coding
semi-structured interviewing

Quantitative data analysis

R/RStudio/RShiny
Python (pandas, sci-kit learn, Jupyter Notebooks)

PROGRAMMING

Python Arduino Processing
HTML/CSS C/C++ Javascript

Data Visualization Libraries/Tools

D3.js Tableau
matplotlib, seaborn PowerBI
ggplot2

DESIGN

Adobe Creative Suite: Photoshop, Illustrator, Premiere, After Effects, Dimension, XD

Microsoft 365: Excel, Powerpoint, Word

Google Workspace: Drive, Sheets, Docs, Slides, Colab

Figma, Miro