Heidi Biggs, HCI/d Research & Design

hbiggs7@gatech.edu

heidibiggsdesign.com

Education

2023	**PhD in Informatics focused on Human Computer Interaction**

The Pennsylvania State University, College of Information Sciences and Technology (IST)

Dissertation Title: Mapping new Terrains in Sustainable HCI: Land/body Doubling and Justice-Oriented Critical Posthuman Subjectivities

Chair: Shaowen Bardzell *Committee:* Daniel Susser (Social Informatics and Ethics); Yubo Kou (HCI) Eduardo Navas (New Media and Art Theory); Audrey Desjardins (IxD: School of Art + Art History + Design University of Washington)

2019   Master of Design in Interaction Design
University of Washington, School of Art + Art History + Design

Thesis Title: Feeling Climate Change: Intersections of Everyday Cycling and Climate Change
Committee: Audrey Desjardins, Design (Chair); Jason Germany, Design; Guillaume Mauger, University of Washington Climate Impacts Group

2017   User Centered Design Certificate; Professional and Continuing Education
University of Washington, Human Centered Design and Engineering

2007   Bachelor of Arts in English Literature
University of Washington, College of Arts and Sciences

Research and Professional Experience

August 2023 – Present	**Research Scientist II,** Georgia Institute of Technology School of Interactive Computing; *Atlanta, GA*
Sept 2020 – August 2023	**Graduate Research Assistant,** The Pennsylvania State University; *State College, PA*
June 2020 – July 2023	**Master of Design Thesis Commentator,** University of Washington; *Seattle, WA*
Sept 2019 – Jan 2021	**Product Designer,** Palador; *Seattle, WA*
Jan 2018 – Sept 2020	**Research Assistant,** University of Washington; *Seattle, WA*
July 2014–January 2018	**Web Designer, CDK Global Digital Marketing;** *Seattle, WA*

Teaching Experience

June–Aug 2019	**Lecturer, University of Washington;** *Seattle, WA*

Co-Taught Simpson Center sponsored Summer Institute in the Arts and Humanities undergraduate research intensive with the theme of 'Building Alternate Worlds.'

April–June 2019   Teaching Assistant, University of Washington; *Seattle, WA*
Design 208: Survey of Design History: read essays, graded tests and mentored student projects.

April–June 2018   Reader & Grader, University of Washington; *Seattle, WA*
Design 208: Survey of Design History: graded and gave feedback on essays and tests.

January–March 2018   Teaching Assistant, University of Washington; *Seattle, WA*
Design 209: Introduction to Typography: gave critique, graded tests and assignments.

Awards and Distinctions

Fellowships

2022-2023   **Penn State Center for Humanities and Information Pre-Graduate Fellowship**
Interdisciplinary fellowshop bridging the humanities and information science.
Total award $24,000

2018-2019   **Joff Hanauer Endowment for Excellence in Western Civilization**
Simpson Center of the Humanities; University of Washington
Human and Non Human Interaction in the Anthropocene, Interdisciplinary Graduate Seminar
Total award $5,000

Paper Awards

2021   **DIS 2021 Honorable Mention Pictorial**
Moving Design Research: GIFs as Research Tools

Travel Awards

2023   **IST Travel Award;** College of Information Sciences and Technology; Penn State University
2019   **Striker Award;** Division of Design Travel Award; University of Washington
For travel to Designing Interactive Systems (DIS) 2019
2019   **NSF Travel Award;** for travel to Society of Literature, Science and the Arts Conference 2019
2019   **SLSA Travel Award;** for travel to Society of Literature, Science and the Arts Conference 2019

Professional

2017   **Quarterly 'Make it Matter' Award;** CDK Global Digital Marketing
For innovative leadership in design

Academic

2003–2007   **Dean's List;** University of Washington & Western Washington University
2006   **Invited to Honors English Program;** University of Washington
2003   **Presidential Scholarship Recipient;** Western Washington University
2003   **Clarinet Performance Scholarship;** Western Washington University

Publications

Peer Reviewed Journal Articles

Under Review   Navas, E., Meeken, L., **Biggs, H.** (2024) Data-Mining and AI Visualization of Key Terms from U.S. Supreme Court Cases from 1789 to 2022, *Digital Humanities Quarterly*

November 2023   Nicenboim, I., Oogjes, D., **Biggs, H.** (2023). Decentering Through Design: Making Posthuman Knowledge; *Human-Computer Interaction* Journal

May 2021   Mengist, N. E., Sidibe, M., **Biggs, H.**, Fox, T., Thurtle, P., & Desjardins, A. (2021). World building: Creating alternate worlds as meaningful making in undergraduate education. *Art, Design & Communication in Higher Education,* 20(1), 29-47.

Book Chapters

Forthcoming   Biggs, H., Oogjes, D., Bardzell, S. (2024) "Film in More-Than-Human Design: Using Film to Envision Beyond the Human" *Seeing Interaction Desing,* Editor Eli Blevis, Springer 2024

Peer Reviewed Archival Conference Papers and Pictorials

July 2023   **Biggs, H.**, Marcotte, A., Bardzell, S. TikTok as a Stage: Performing Rural #farmqueer Utopias on TikTok *Proceedings of the 2023 Conference on Designing Interactive Systems (DIS 2023).* ACM. (acceptance rate 24%)

April 2023   **Biggs, H.,** Suttles, S., Bardzell, S. Redlining Maps and Terrains of Sustainability: Interdisciplinary

Mapping of Racialized Redlining to Present-Day Sustainability Agendas in HCI *Proceedings of the 2021 Conference on Human Factors in Computing Systems (CHI 2023).* ACM. (acceptance rate: 28.4%)

April 2023   Benjamin, J., **Biggs, H.**, Berger, A., Rukanskaite, J., Heidt, M., Merril, M., Pierce, J., Lindley, J. The Entoptic Field Camera as Metaphor-Driven Research-through-Design with AI Technologies *Proceedings of the 2021 Conference on Human Factors in Computing Systems (CHI 2023).* ACM. (acceptance rate: 28.4%)

October 2021   **Biggs, H.**, Joshi, T. Murphy, R. Bardzell, J., Bardzell, S. Alternatives to Agrilogistics: Designing for Ecological Thinking. *Proceedings of the ACM on Human-Computer Interaction*, Vol. 5, CSCW2, Article 413 (October 2021), 31 pages. ACM.

June 2021   **Biggs, H.**, Key, C., Desjardins, A., Psarra, A. Moving Design Research: GIFs as Research Tools *Proceedings of the 2021 Conference on Designing Interactive Systems (DIS 2021).* ACM. (acceptance rate 26.7%) **(Honorable Mention: top 1% of pictorials and papers)**

May 2021   **Biggs, H.**, Bardzell, J., Bardzell, S. Watching Myself Watching Birds: Abjection, Ecological Thinking, and Posthuman Design. *Proceedings of the 2021 Conference on Human Factors in Computing Systems (CHI 2021).* ACM. (acceptance rate: 26.3%)

May 2021   Desjardins, A., **Biggs, H.** Data Epics. *Proceedings of the 2021 Conference on Human Factors in Computing Systems (CHI 2021).* ACM. (acceptance rate: 26.3%)

July 2020   **Biggs, H.**, Desjardins, A. Crafting and Embodied Speculation: An accounting of prototyping methods. *Proceedings of the 2020 Conference on Designing Interactive Systems Conference (DIS '20).* (pp. 697-709). ACM. (acceptance rate: 27%)

April 2020   **Biggs, H.**, Desjardins, A. High Water Pants: Designing Embodied Environmental Speculation. *Proceedings of the 2020 Conference on Human Factors in Computing Systems (CHI 2020).* ACM. (acceptance rate 24%)

April 2020   Desjardins, A., **Biggs, H.**, Viny, J., Key, C. IoT Data in the Home: Observing Entanglements and Drawing New Encounters. *Proceedings of the 2020 Conference on Human Factors in Computing Systems (CHI 2020).* ACM. (acceptance rate 24%)

June 2019   Desjardins, A., Key, C., **Biggs, H. R.**, & Aschenbeck, K. (2019, June). Bespoke Booklets: A Method for Situated Co-Speculation. In *Proceedings of the 2019 Conference on Designing Interactive Systems Conference (DIS' 19).* (pp. 697-709). ACM. (acceptance rate: 25%)

Doctoral Consortium

July 2023   **Biggs, H.** Designing Posthuman Data: Mapping Relations Between Bodies, Land, and Data *Companion Publication to Proceedings of the 2023 Conference on Designing Interactive Systems (DIS 2023).* ACM.

Workshops

April 2023   Wieczorek-Berkes, C., **Biggs, H.,** Jack, M., Forlano, l., Bardzell, S. Collective Healing to Support Design Futures: Building Community and Exploring Methods. *Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI 2023). (Acceptance Rate 35%)*

September 2022   Wieczorek-Berkes, C., **Biggs, H.,** Jack, M., Forlano, l., Bardzell, J., Bardzell, S., *It Starts with Healing: Acknowledging Collective Trauma in Participative Futuring*, Conference on Participatory Design 2022 (PDC'22)

Position Papers

May 2022   **Biggs, H.** (2022) Histories of Data and Critical Environmental Justice. Workshop at the ACM Conference on Human Factors in Computing Systems (CHI'22)

June 2019	**Biggs, H.**, Desjardins, A. (2019) Everyday Acts of Noticing. Workshop at the ACM Conference on Designing Interactive Systems (DIS'19).

Dissertation

August 2023   **Biggs, H.** (2023) Mapping New Terrains in Sustaianble HCI: Land/Body Doubling and Justice-Oriented Critical Posthuman Subjectivities

Master Of Design Thesis

June 2019   **Biggs, H.** (2019) Feeling Climate Change: Intersections of Everyday Cycling and Climate Change. School of Art + Art History + Design, University of Washington.

Magazine Articles

June 2019   **Biggs, H.** High Water Pants: Intersections of Everyday Cyclists and Climate Change. Arcade Magazine 37.2 (November 2019)

Conference Presentations

Paper Presentation

March 2023   **GAN to the Mississippi: Generative Adversarial Networks for Posthuman Relations to Place** Presented at the American Association of Geographers (AAG) Conference 2023; Critical Visual Methodologies Session

Panel and Round Table Presentation

April 2023   **Experiences of Queer and Trans GraduateStudents: A Panel Discussion** American Society for Engineering Education Zone 1 Conference; Penn State University

September 2020   **Crafting Commons: A round table on cybercraft networks** Our Networks Conference 2020; Online, Based out of Toronto, Ontario, Toronto Media Arts Center.

November 2019   **Speculative Design in Climactic Times Round Table** Society of Literature, Science and the Arts Conference, UC Irvine, CA

Exhibitions & Performances

September 2019   **Textile Intersections Conference Exhibition;** London, UK High Water Pants: Tangible Intersections of Everyday Cyclists and Climate Change

June 2019   **MFA & MDes Thesis Exhibition;** Henry Art Gallery, Seattle, WA Feeling Climate Change: Intersections of Everyday Cycling and Climate Change

April 2019   **On the Boards Performance Lab;** Seattle, WA Racquetball Score Sound Performance

April 2019   **Design Trouble Symposium**; University of Washington, Seattle, WA Racquetball Score Sound Performance

Workshops and Jamborees Attended

August 2022   **Design Research Works Jamboree 2022** Lake District UK; funded by UK Future Leaders Fellowship

May 2022   **Towards a Material Ethics of Computing: Addressing the Uneven Environmental Stakes of Digital**

Infastructures
Conference on Human Factors in Computing Systems (CHI) 2022

June 2019   **Noticing as a Method for Design Research**
Designing Interactive Systems Conference (DIS) 2019

October 2018   **Envisioning Other Worlds: The Place of World Building in a Liberal Arts Education**
Comparative History of Ideas Department, University of Washington

May 2018   **Long(er)-Term Design Thinking Workshop**
NSF-Sponsored Workshop; University of Washington

Invited Speaking Events

Jan 13, 2022   **Design 206 Design Methods;** *Online, University of Washington*
The Urgency of Climate Change

June 11, 2021   **Everyday Design Studio and Studio Tilt Speaker Series;** *Online, Hosted by Simon Frasier University*
Posthuman Noticing as a Design Provocation

April 20, 2021   **Symposium on Design Graduate Education;** *Online, Hosted by University of Washington*
How's Grad School Going? A Discussion with Current Design Graduate Students

Nov 10, 2020   **Design 582 Masters Seminar;** *University of Washington*
Sustainable Human Computer Interaction and the Anthropocene

July 2019   **DXARTS 410 Embodied Wearable Technology;** *University of Washington*
Raquetball Score and Embodied Insturments

Press

June 2021   **Penn State News**; June 11, 2021; Jessica Hallman
"Treating non-humans as stakeholders key to sustainable technologies"

June 2021   **Science Blog;** June 13, 2021
"Treating non-humans as stakeholders key to sustainable technologies"

June 2021   **Florida News Times;** June 14, 2021
"Treating non-humans as stakeholders key to sustainable technologies"

Service

2024   CHI Associate Paper Chair, Critical Computing and Sustainability
2023   DIS Associate Paper Chair, Critical Computing and Design Theory and Change Through Design
2023   DIS Student Volunteer Coordinator Co-Chair
2022   CHI Student Volunteer
2020-2022   Reviewer Designing Interactive Systems (DIS)
2021-2023   Reviewer Conference on Human Factors in Computing Systems (CHI)
2022   Reviewer Tangible and Embeded Interactions (TEI)
2022   Reviewer International Association of Societies of Design Research (IASDR)
2022   Reviewer Computer Supported Cooperative Work (CSCW)