

Will Sutherland

Research Interests

Information systems, Information infrastructures, computer supported cooperative work, social informatics, social studies of science, algorithmic systems

Education

University of Washington, Seattle – *Ph.D., Human Centered Design and Engineering*

SEPTEMBER 2018 – AUGUST 2025

University of North Carolina, Chapel Hill – *MS, Information Science*

AUGUST 2015 – MAY 2017

University of Colorado, Boulder – *BA, History*

AUGUST 2010 – MAY 2014

Publications

Refereed Articles

Sutherland, W., Tanweer, A.. Transparency as organizational accomplishment: How an astronomical collaboration learns to observe its algorithms. *Information Research*, 31(iConf), 1639-1651.

Lee, C. P., Sutherland, W., Alimohammadi, N., Jones LeDoux, R., & Neang, A. B. (2025). The Agony and Ecstasy of Extended Research on Computational Systems. In *Proceedings of the sixth decennial Aarhus conference: Computing X Crisis* (pp. 223-231).

Sutherland, W., Neang, A., Lee, C.P. (2025). Making Software Work Sustainable for the Academic Research Group: A Comparative Case Study. In *Hawaii International Conference on System Sciences*.

Hauser, E., Sutherland, W., and Jarrahi, M. (2024). Participatory Observation Methods Within Data-Intensive Science: Formal Evaluation and Sociotechnical Insight. In *International Conference on Information*. Springer, Cham.

Sutherland, W., Paine, D., & Lee, C. P. (2024). 'The Cloud is Not Not IT': Ecological Change in Research Computing in the Cloud. *Computer Supported Cooperative Work*.

- Neang, A. B., Sutherland, W., Ribes, D., & Lee, C. P. (2023) Organizing Oceanographic Infrastructure: The Work of Making a Software Pipeline Repurposable. *Proceedings of the ACM on Human-Computer Interaction*, 5 (CSCW).
- Sims, B., Sutherland, W., Ebey, K.R., Dauelsberg, L.R., Turton, T.L. (2021) Research on Remote and Hybrid Scientific Work: A literature review, LA-UR-21-31588, Los Alamos National Laboratory (LANL).
- Soden, R., Ribes, D., Avle, S., & Sutherland, W. (2021). Time for historicism in CSCW: An invitation. *Proceedings of the ACM on Human-Computer Interaction*, 5 (CSCW2), 1-18.
- Bennett, A., Sutherland, W., Tian, Y., Finn, M., & Acker, A. (2021, September). Pathways to Data: From Plans to Datasets. In *2021 ACM/IEEE Joint Conference on Digital Libraries (JCDL)* (pp. 254-257). IEEE.
- Sutherland, W., & Ribes, D. (2021). Representationalism: A Haunting. *Postphenomenology and Imaging: How to Read Technology*, 283.
- Sahneh, F., Balk, M. A., Kisley, M., Chan, C. K., Fox, M., Nord, B., ... & Merchant, N. (2021). Ten simple rules to cultivate transdisciplinary collaboration in data science. *PLoS computational biology*, 17(5), e1008879.
- Nash, C., Jarrahi, M. H., & Sutherland, W. (2021). Nomadic work and location independence: The role of space in shaping the work of digital nomads. *Human Behavior and Emerging Technologies*, 3(2), 271-282.
- Neang, A. B., Sutherland, W., Beach, M. W., & Lee, C. P. (2021). Data integration as coordination: The articulation of data work in an ocean science collaboration. *Proceedings of the ACM on Human-Computer Interaction*, 4(CSCW3), 1-25.
- Jarrahi, M. H., Newlands, G., Lee, M. K., Wolf, C. T., Kinder, E., & Sutherland, W. (2021). Algorithmic management in a work context. *Big Data & Society*, 8(2), 20539517211020332.
- Jones, R., Beach, M. W., McClure Haughey, M., Sutherland, W., & Lee, C. P. (2021). Construction of Shared Situational Awareness in Traffic Management. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1-27.
- Nash, C., Jarrahi, M. H., & Sutherland, W. (2021). Nomadic work and location independence: The role of space in shaping the work of digital nomads. *Human Behavior and Emerging Technologies*, 3(2), 271-282.
- Neang, A. B., Sutherland, W., Beach, M. W., & Lee, C. P. (December 2020). Data Integration as Coordination: The Articulation of Data Work in an Ocean Science Collaboration. *Proc. ACM Hum.-Comput. Interact.* 4, CSCW3, Article 256, 25 pages.
- Feinberg, M., Sutherland, W., Nelson, S.B., Jarrahi, M. H., and Rajasekar, A. (2020). The New Reality of Reproducibility: The Role of Data Work in Scientific Research. *Proc. ACM Hum.-Comput. Interact.* 4, CSCW1, Article 35, 22 pages. <https://doi.org/10.1145/3392840>
- Hauser, E., & Sutherland, W. (2020, March). Temporality in Data Science Education: Early Results from a Grounded Theory Study of an NSF-Funded CyberTraining Workshop. In *International Conference on Information* (pp. 536-544). Springer, Cham.

- Jarrahi, M. H., Sutherland, W., Nelson, S. B., & Sawyer, S. (2020). Platformic Management, Boundary Resources for Gig Work, and Worker Autonomy. *Computer Supported Cooperative Work (CSCW)*, 29(1), 153-189.
- Sutherland, W., Jarrahi, M. H., Dunn, M., & Nelson, S. B. (2019). Work Precarity and Gig Literacies in Online Freelancing. *Work, Employment and Society*, 0950017019886511.
- Soden, R., Ribes, D., Jack, M., Sutherland, W., Khovanskaya, V., Avle, S., ... & Bødker, S. (2019, November). Fostering Historical Research in CSCW & HCI. In *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing* (pp. 517-522).
- Kinder, E., Jarrahi, M. H., & Sutherland, W. (2019). Gig Platforms, Tensions, Alliances and Ecosystems: An Actor-Network Perspective. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1-26.
- Jarrahi, M. H., & Sutherland, W. (2019). Algorithmic Management and Algorithmic Competencies: Understanding and Appropriating Algorithms in Gig work. In *International Conference on Information (pp. 578-589)*. Cham: Springer International Publishing.
- Jarrahi, M. H., Philips, G., Sutherland, W., Sawyer, S., & Erickson, I. (2019). Personalization of knowledge, personal knowledge ecology, and digital nomadism. *Journal of the Association for Information Science and Technology*.
- Sutherland, W., & Jarrahi, M. H. (2018). The sharing economy and digital platforms: A review and research agenda. *International Journal of Information Management*, 43, 328-341.
- Nash, C., Jarrahi, M. H., Sutherland, W., & Phillips, G. (2018, March). Digital nomads beyond the buzzword: Defining digital nomadic work and use of digital technologies. In *International Conference on Information (pp. 207-217)*. Springer, Cham.
- Sutherland, W., & Jarrahi, M. H. (2017). The gig economy and information infrastructure: the case of the digital nomad community. *Proceedings of the ACM on Human-Computer Interaction*, 1(CSCW), 97.

Articles under review

- Tanweer, A., Sutherland, W., Bianco, F., Diesner, J., Holbrook, J., Johnston, K., Knapen, J., Leahey, E., Sokoloski, J., Sturmer, A., Theissen, C., Trautvetter, L., Vieira, J. (under review). All eyes on the Rubin Observatory: In an era of data abundance, a new moral economy is emerging.
- Neang, A., Sutherland, W., Ribes, D., Lee, C.P. (under review) Moving Targets in Collaborative Science: Boundary Spanning in Transdisciplinary Iterative Problem Formation.

Conference Posters

- Tian, Y., Bennett, A., Sutherland, W., Ferguson, A., Ford, M., Li, J. N. K., ... & Acker, A. (2021). An Analysis of NSF Data Management Plan Guidelines. *International Conference on Information*.

Talks & Workshops

Conference Presentations

Sutherland, W., Tanweer, A.. Transparency as organizational accomplishment: How an astronomical collaboration learns to observe its algorithms. iConference, Edinburgh, Scotland.

From substrate to instrument: Software practice and rigor in an astrophysics collaboration — 2025 — *Annual Meeting of the Society for Social Studies of Science (4S)*, Seattle, Washington, USA.

Making software work sustainable for the academic research group — 2025 — *Hawaii International Conference on System Sciences (HICSS)*, Waikoloa Village, Hawaii, USA

Big Sky, big data, big changes: on the shifting moral economy of astronomy in an era of abundance — 2025 — *Annual Meeting of American Astronomical Society*, National Harbor, Maryland, USA

Making an issue out of an algorithm: Explication and opacity in the design of an astronomical survey cadence — 2024 — *Annual Meeting of American Association of Information Science and Technology (ASIS&T)*, Calgary, CA

Software problems: Local change in Cosmology and Oceanography — 2024 — *Scientific Software as a Social Practice Workshop*, eScience Institute, University of Washington, Seattle, Washington, USA

Coding Astronomical Futures: Reconciling grand visions and material practice in the development of astronomical tools — 2023 — *Annual Meeting of the Society for Social Studies of Science*, 2023, Honolulu, Hawaii, USA

The New Reality of Reproducibility: The Role of Data Work in Scientific Research — 2020 — *Computer-Supported Cooperative Work*, 2020 (virtual)

Temporality in Data Science Education — 2020 — *The International Conference on Information*, 2020, Borås, Sweden (virtual)

How Upworkers Make Sense of Algorithms — 2019 — *Annual Meeting of the Society for Social Studies of Science*, 2019, New Orleans, Louisiana, USA

Algorithmic Management and Algorithmic Competencies: Understanding and Appropriating Algorithms in Gig work — 2019 — *The International Conference on Information*, 2019, College Park, Maryland, USA

Gig Work in the Digital Nomad Community — 2018 — *ACM Conference on Computer-Supported Cooperative Work (CSCW)*

Personalization of Knowledge, Personal Knowledge Ecology, and Digital Nomadism — 2017 — *80th Annual Meeting of the Association of Information Science and Technology (ASIS&T)*, Washington D.C., USA

Workshops & Panels

Exploring social informatics in the algorithmic environment (SIG-SI) –
*October, 2024 – Annual Meeting of the American Association of
Information Science and Technology (ASIS&T), Calgary, CA*

Scientific software as a social practice workshop – *April, 2023 – eScience
Institute, University of Washington*

The Lemon Labs – *2019 – Biosphere 2, University of Arizona*

Fostering Historical Research in CSCW and HCI – *2019 – Computer Supported
Cooperative Work (CSCW)*

Disrupting Algorithms: Innovating Work and Life in the Digital Economy – *2019 –
Society for Social Studies of Science Annual Meeting*

Work in the Age of Intelligent Machines: Key Dilemmas for the Information
Community – *2019 – The iConference*

Awards & Fellowships

UW Data Science Postdoctoral Fellow – *2025*

Best Paper Award (Soden et al., 2021) – *CSCW 2021*

Honorable Mention for Best Paper Award (Neang et al., 2021) – *CSCW 2020*

Runner up for Lee Dirks Award for Best Paper (Jarrahi and Sutherland, 2019) –
iConference 2019

Peer Review

American Sociological Review – *2021*

ACM Conference on Human Factors in Computing Systems (CHI) – *2024, 2025*

Annual meeting of the Association for Information Science and Technology
(ASIS&T) – *2024, 2025, 2026*

Big Data & Society – *2025*

Conference on Computer Supported Cooperative Work (CSCW) – *2018, 2019, 2020, 2021,
2022, 2025, 2026*

Designing Interactive Systems (DIS) – *2024*

Digital Geography and Society – *2023*

European Conference on Computer Supported Cooperative Work (ECSCW) – *2021, 2022*

Hawaii International Conference on System Sciences (HICSS) – *2024, 2026*

Information Systems Journal – *2023, 2024*

International Conference on Information (iConference) – *2018, 2019, 2020*

International Conference on Information Systems – *2022*

International Journal of Human-Computer Interaction – *2019*

International Journal of Information Management – *2020*

Journal of Computer Supported Cooperative Work (CSCW) – *2023, 2025, 2026*

Journal of Information Technology and Tourism (JITT) – *2020*

Organization - 2022

Platform for Advanced Scientific Computing (PASC) - 2024, 2025

Social Studies of Science (SSS) - 2025, 2026

Technology in Society - 2024

Conference Committees and Moderation

Annual meeting of the Society for Social Studies of Science (4S) - 2025

International Conference on Information (iConference) - 2024

Platform for Advanced Scientific Computing (PASC) - 2024, 2025

Work Experience

eScience Institute, University of Washington, Seattle – *Postdoctoral scholar*

SEPTEMBER 2025 - Present

Grant-funded research project on research software engineering in the sciences, involving close coordination between qualitative and quantitative sides of a research team.

- Conducting interviews
- Research design
- Qualitative data management
- Academic writing and literature review
- Giving academic presentations
- serve as co-chair of the postdoctoral fellows seminars, organizing talks and facilitating discussion

University of Washington, Seattle – *Graduate Research Assistant*

SEPTEMBER 2023 - May 2025

Grant-funded research project for ethnographic investigation of a large astronomical survey project, focused on how (or whether) the large survey model of astronomical work is democratizing access to data, and the role of software in emerging forms of astronomical research work.

- Performed regular observations at sites of work and conferences, and wrote field notes
- Designed interview protocols and conducted interviews with researchers and software developers
- Managed and processed qualitative data, including field notes, interviews, and other artifacts
- Performed qualitative interpretive data analysis in the grounded theory tradition
- Wrote academic publications
- Assisted with instruction in Directed Research Groups (DRGs) focused on the project, which involved working with undergraduates, masters students, and other Ph.D. students
- Gave academic conference presentations on the project's findings

Los Alamos National Laboratory – *Graduate Research Assistant*

JUNE 2022 – AUGUST 2022

I returned to Los Alamos for the summer of 2022 to work on a project focused on understanding scientific collaboration on large software projects in the Exascale Computing Project (ECP).

- Assisted in the design of interview study
- Academic literature review
- Assisted with the writing of a report of findings

Los Alamos National Laboratory – *Graduate Research Assistant*

JUNE 2021 – AUGUST 2021

I worked as a summer research assistant at Los Alamos National Laboratory (LANL) on a project aiming to better understand remote and hybrid collaborative work in order to inform policy at the lab.

- Academic literature review
- Writing for a summary report (Sims et al., 2021)

University of Washington, Seattle – *Graduate Research Assistant*

APRIL 2021 – JUNE 2022

I worked as a research assistant on a grant-funded comparative ethnographic project studying convergence actors across the sciences. I contributed across this project, from the writing of the grant proposal through data collection and analysis to publication.

- Assisted in writing the grant proposal
- Assisted in designing a larger study, which was comparative across field sites
- Qualitative data analysis in the grounded theory tradition
- Organized and managed qualitative interview and observation data
- Conducted interviews
- Performed observations in scientific research laboratory and wrote field notes
- Wrote research publications and shepherded them through the review process
- presented findings at conferences

University of Washington, Seattle – *Teaching Assistant*

AUTUMN 2019 – WINTER 2023

I was a Teaching Assistant in the Department of Human Centered Design and Engineering (HCDE) and for the Masters in Human Computer Interaction and Design (MHCI+D) at the University of Washington.

- Assisting in the instruction of classes:
 - HCDE 419: Concepts in Human Computer Interaction
 - HCDE 503: Navigating Design in Organizations
 - HCDE 517: Usability Studies
 - HCDE 592: Capstone Planning
 - HCDE 501: Theoretical Foundations of Human Centered Design and Engineering
 - HCID 531: Evaluation Studio
 - HCDE 412: Qualitative research methods in Human Centered Design and Engineering
- Giving selected lectures

- Grading and providing feedback on assignments
- Small group discussion and project guidance
- Facilitating class discussions

School of Information and Library Science (SILS), University of North Carolina – Information Technology Assistant

AUGUST 2015 – MAY 2017

I worked as an assistant at the information technology helpdesk in the library within SILS. This job spanned my two years as a masters student, not including summers, and helped support my degree.

- Helped patrons and students handle technical problems with personal or school technology resources
- Maintained and updated computer labs, servers, and other computing resources
- Assisted technical problems in classes at SILS
- Helped set up new technological resources, such as a 3D printer

Media Archaeology Lab, Boulder, CO – Assistant

APRIL 2015 – AUGUST 2015

I worked as an assistant at the Media Archaeology Lab (MAL) at the University of Colorado, Boulder.

- Maintained legacy computer systems
- Organized and updated catalog of objects in the collection
- Provided tours of the lab and answered questions
- Setup a digital curation environment for the processing of floppy disks in the lab's collection

University of Colorado Libraries, Boulder CO – Archival Assistant

JANUARY 2015 – MAY 2015

I worked with the digital archivist at the University of Colorado Libraries to process and organize digital materials.

- Used digital curation software to image over a thousand floppy disks
- Described digital materials and created metadata
- Wrote simple scripts to accomplish processing tasks

University of Colorado Libraries, Boulder CO – Digitization Assistant

JANUARY 2015 – MAY 2015

I worked in the digitization lab at the University of Colorado Libraries, scanning various materials from other departments and processing digital collections.

- Scanned books, papers, and emulsion plate photographs
- Created 3D images of artifacts from the University of Colorado Museum of Natural History
- Cleaned, sharpened, and otherwise processed digital scans
- Created metadata and organized digital objects

University of Colorado Libraries, Boulder CO – Special collections assistant

AUGUST 2014 – DECEMBER 2014

I worked as an assistant in the University of Colorado Libraries in their Special Collections.

- Helped organize materials and wrote topical guides to the collection
- Helped to prepare topical displays of the collections

University of Colorado Libraries, Boulder CO – Archival Assistant

JANUARY 2014 – DECEMBER 2014

I worked as an assistant in the University of Colorado Libraries in the Archives department. My role developed from writing collection guides and interacting with patrons to organizing collections and preparing documents for accession.

- Managed the archives front desk and helped patrons by retrieving collections or providing information
- Wrote collection guides
- Processed and organized archival collections
- Searched collections for remote patrons
- Visited houses of donors and prepared new collections for accession

Freelance Researcher

FEBRUARY 2014 – JUNE 2014

I assisted an author in performing background research for a book she was writing.

- Located historical sources, specifically microfilm copies of newspapers
- Examined microfilm records of newspapers spanning a number of years for mention of particular people, and for notable events
- Summarized findings in writing