

Detailed workshop plan

Death of the Design Researcher? Creating Knowledge Resources for Designers Using Generative AI

Detailed Workshop Description DIS 2023

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Recruitment and intended audience

We aim to recruit researchers and practitioners who have engaged in creative practices with the use of Generative AI (GenAI). These participants can come from the fields of design, arts, computer science, HCI, policy-making, and education. The participants will be valued for their (initial or preliminary) experiences and reflections using GenAI. We will recruit participants via diverse channels. We first build on the community established around last year's DIS workshop (van der Maden et al., 2023) which includes a wide international audience. We further aim to make use of mailing lists in design, HCI and the arts, as well as social media (e.g., Twitter), and use our website as a landing page. We aim for around 25 participants, who will be asked to fill out a template capturing their contribution's context and prompting them to answer a series of through-provoking questions related to the workshop's themes.

We will create a website about our workshop. This will be used for recruitment (including the call for participants and details about the workshop). After the workshop, the website will feature the presented work, a brief summary of the activities during the workshop, and a summary of the outcomes. The idea is that the website will serve as a resource for anyone interested in using genAI.

Workshop

The workshop will have both hands-on and discussion-based components. Participants will have the opportunity to present (and demonstrate) their own projects/cases related to GenAI in design and discuss the implications of GenAI in design research and practice with the workshop attendees. The first day of the workshop will be held

Preliminary time table

Our preliminary timetable is designed with flexibility to adapt to participants' interests and feedback. This strategy hopefully helps foster a participatory environment and ensures the workshop can dynamically respond to the group's needs, enriching the overall experience and outcomes.

Day 1 Detailed Workshop Plan

09:30 - 10:00: Arrival, Coffee, and Networking

Participants arrive and are welcomed with coffee, creating an informal setting for networking and initial introductions.

10:00 - 12:00: Paper/Pictorial/Prototype Presentations Session 1

The first session kicks off with a series of presentations, showcasing current work, insights, or projects related to the workshop's theme. Depending on the number of submissions we will allocate approximately 5 minutes for each presentation so as not to overload the participants. Presentations can be live or pre-recorded with a live Q&A session.

12:00 - 13:00: Lunch Break

A lunch break provides attendees with the opportunity to discuss the morning's presentations and network in a more relaxed setting.

13:00 - 15:30: Paper/Pictorial/Prototype Presentations Session 2

The afternoon session features another set of presentations. This session is designed to further dive into the workshop's topics, stimulating deeper discussion and reflection among participants.

15:30 - 16:30: Discussion to Wrap Up the Day

This session is dedicated to reflecting on the day's discussions, presentations, and emerging themes. It's an opportunity for participants to share thoughts, highlight interesting points, and set the stage for the next day's activities.

16:30 - End: Networking and Refreshments

The day concludes with an informal networking session, accompanied by refreshments, allowing for unwinding and fostering connections among participants in a casual atmosphere.

Day 2 Detailed Workshop Plan

09:30 - 10:00: Plenary Discussion About Yesterday

Day 2 begins with a plenary discussion, recapping the key insights and unresolved questions from the previous day.

10:00 - 12:00: Themed Discussion/Analysis

Building on the foundation laid on Day 1, themed discussions or analysis sessions are held to explore specific areas of interest in greater depth. This extends and reflects the activities of the DIS2023 version of the workshop, where tabled discussions were held around common themes extracted from the participants' contributions. These discussions sparked highly fruitful discussion and set the base for our collaborative short article.

12:00 - 13:00: Lunch Break

Another opportunity for participants to relax, network, and discuss the morning's themed discussions over lunch.

13:00 - 16:00: Collaborative Exercises According to Group Need

The afternoon is dedicated to hands-on collaborative exercises, tailored to the needs and interests of the participants. Activities may vary, including but not limited to, working towards a collective resource (e.g., library), prototyping designs, or elaborating on discussions through written outputs. Participants will be encouraged to self-organize into groups based on their interests and the activities they wish to engage in.

16:00 - 17:00: Wrap Up

The workshop concludes with a session to summarize the discussions, activities, and outcomes of the past two days. This is an opportunity for final reflections, sharing insights, and discussing potential next steps or future collaborations.

17:30 - 20:00: Dinner (for whoever wants to join)

As an optional extension of the workshop, a dinner is organized for participants who wish to continue conversations and networking in a social setting.

Required Facilities

We plan to host our workshop in-person. On the first day, we will also hold a synchronous online meeting (e.g. Zoom) for participants who cannot attend in-person. Presentations will be livestreamed as will it serve as the primary stage for the online attendees. Depending on the number of online attendees, the online and in-person presentation will alternate in order. We will need a projector for presentations and demonstrations. Additionally, tables and chairs, as well as note-taking materials such as pens, notes, and papers, will be required for the 4-5 participants to perform workshop activities as a group.

Participants

The workshop is aimed at researchers, practitioners, and educators working in the field of design, art and/or generative artificial intelligence. We invite participants to present their cases and share their experiences and ideas concerning the potential of GenAI in design research.

It is expected that the participants of the workshop have a basic understanding of the capabilities of GenAI and its applications.

Inclusion and accessibility

To ensure inclusivity and global engagement, our workshop's Day 1 is structured as a fully hybrid event, enabling both online and in-person participation. This setup not only accommodates remote presentations but also allows for asynchronous contributions through pre-recorded videos. Their contributions will also be integrated into our online library, ensuring diverse insights are accessible for all. We have (online) workshop facilitators in different timezones, which if there is interest among the online attendees, may host a parallel discussion round to ours at day 2. This way we hope to encourage participation across different time zones and locations. Further, we will provide a form for all accepted participants to specify any accessibility needs, such as captioning, environmental requirements, or materials in accessible formats. Additionally, all online presentations will feature automatic captioning through Zoom.

Anticipated outcomes

Our workshop aims to develop an online resource for GenAI design projects, which will serve as both an outreach and educational tool. This tool is a library that will include cases, and also principles in the form of actionable guidelines for designers and design researchers.

Additionally, we intend to produce a collaborative publication that builds on our previous article which is currently under review, further contributing to the field's collective knowledge. In that way, the workshop consolidates and also expands the network of design researchers focused on GenAI.

A plan for how the results of the workshop will be disseminated beyond DIS 2024

The workshop's primary goal is to develop an innovative online resource that extends beyond a traditional library, serving as a comprehensive repository for contributions in the realm of GenAI in design research. To facilitate this, participants will be encouraged to fill out a detailed template that not only captures the context of their contributions but also addresses a series of thought-provoking questions aligned with the workshop's themes. These filled templates will form the backbone of the online resource, the specifics of which—such as themes, format, and depth of discussion—will be a central topic of discussion on the second day of the workshop. Additionally, the information gathered through these templates will enable a thorough post-hoc analysis of the current state of GenAI within design research, culminating in a collaborative publication targeted at an ACM or related venue, be it a conference or journal. Our aim is to launch an initial version of this resource by the end of the DIS conference, setting the stage for ongoing community engagement and growth within our dedicated Slack channel. This approach not only promises to enrich the discourse around GenAI in design but also fosters a collaborative environment for continued exploration and innovation in the field.

Call for participation

The past two years saw a boom in the field of generative artificial intelligence (GenAI). The radical accessibility of this technology has the potential to transform the creative field including design practice and design research. For instance by helping designers generate, explore, and extend ideas more quickly, or by offering serendipity, surprise and generative friction through its unpredictable outcomes. It is also likely that GenAI will open up new creative modalities and possibilities for creative exploration, as well as new opportunities for design research. Despite these potentials and advancements, there remains little published academic work on the topic. In this workshop, we intend to take stock of ongoing projects using GenAI in the context of design, with a focus on creating a comprehensive vision for the role of GenAI in design practice and avenues for design research. We aim to collaboratively develop this vision by synthesizing the work that is currently developing within the community, and that participants will share during the workshop. Rather than introducing and exploring tools, we ask participants to present their own cases, so we can build together upon our own experiences with GenAI in design.

Participants should complete the following template which captures their submissions context and includes several thought-provoking prompts aligned with the workshop themes: *[link to be added after acceptance]*. The contributions should contain authors' (initial or preliminary) experiences and reflections using GenAI in creative practices. The contributions should be emailed to *[to be determined after acceptance]*. For the presentation, we encourage participants to pre-record a 2-minute video of their contribution. We will select submissions based on their relevance, quality, and diversity. We will limit the size of the workshop to 25 participants. At least one author of each accepted submission must attend the workshop and all participants must register for both the workshop and for at least one day of the conference.

Short bios

Willem van der Maden is a postdoc at the Procedural Expressions Lab (PXL) in the Digital Design department of the IT University Copenhagen. His research is in the conjunction of interaction design and AI. He is interested in how we may translate people's lived experiences into evaluation paradigms for AI, previously working on the design of AI systems aligned to wellbeing.

Evert van Beek is a PhD candidate at the Department of Industrial Design Engineering at Delft University of Technology. His research investigates design and innovation in the Dutch energy transition with a specific focus on human building co-performances.

Iohanna Nicenboim is a designer and design researcher currently completing her PhD at Delft University of Technology, funded by a Microsoft Research Scholarship. Her research focuses on developing a more-than-human approach to studying and designing AI. Within the rich space between critical posthuman and feminist theory and design practice, she has developed

methodological interventions and emergent notions that aim at situating AI. On these topics, she has published several papers and led workshops and panels at HCI and design conferences.

Peter Kun is a postdoc at the Media Art and Design group at IT University of Copenhagen. He explores new ways of experiencing art by building interactive installations with image generation AI models. His research is centered around creative and opportunistic utilization of emerging technology in design.

Derek Lomas is assistant professor of Positive AI at the Faculty of Industrial Design Engineering. He designs data-informed smart systems for human wellbeing, bringing humanist values into AI systems. He is a classicist, futurist, cognitive scientist and proponent of the magic of resonance in design.

Eunsu Kang is an artist, a researcher, and an educator who explores the intersection of art and machine learning as well as the possibility of creative AI. Her works gradually have transformed into interactive and interdisciplinary art projects, which currently focuses on the nascent area of AI art. A few years ago she left her tenured art professor position to design and teach new courses (Art and Machine Learning, Creative AI) at the Machine Learning Department of Carnegie Mellon University.

Joseph Lindley is a Senior Research Fellow at ImaginationLancaster where he runs Design Research Works, a project aiming to capture and communicate the value of Design Research, showing its relevance to help address the 21st century's socio-technological challenges, including the adoption of AI. designresearch.works

Timothy Merritt is an associate professor of Interaction Design in the Human-centered Computing and AI/ML research groups at the Department of Computer Science at Aalborg University, Denmark. His research focuses on understanding how people respond to AI in real-time cooperative activities, most recently search and rescue with drones and conversational agents that use humor to repair conversational breakdowns. He collaborates with government and industry, including Volkswagen AG, and The LEGO Group, among others. He received a Ph.D. in human-computer interaction from the National University of Singapore and a Master of Arts in Digital Culture from the University of Jyväskylä, Finland. www.ixd.net

Petra Jääskeläinen is a PhD Candidate and a critical design researcher at KTH Royal Institute of Technology, focusing on sustainability and ethics of Creative AI/AI arts with a background in Human-Computer Interaction and Design for Change. Recent research work has included more-than-human and feminist environmental post-humanities inquiries on AI arts, as well as studies on culture, materiality, and imaginaries of environmental sustainability in the context of AI arts. Current research interest lies in critically examining the ethical underpinnings of AI art technologies and diversifying the values engaged in constructing their technological-material-cultural futures.

Brett A. Halperin is pursuing a PhD in Human Centered Design & Engineering with a graduate certificate in Cinema & Media Studies at the University of Washington. His research investigates computational media and film production in labor and grassroots organizing contexts with a focus on AI from a critical design lens. Previously, he worked as a Senior User Experience Designer, as well as studied at Brown University and the Rhode Island School of Design.

Michael Muller works in the role of Senior Research Scientist at IBM Research, in an intersection of HCI, design, AI, and social justice. His current work addresses Human Centered AI (particularly human-AI co-creativity) for workplace applications. Michael serves as co-chair of ACM SIGCHI CARES, and is just completing a two-year term as CHI 2024 PC subcommittee co-chair for Critical and Sustainable Computing and Social Justice. Michael is a member of Fempower.tech, AccessSIGCHI, and the Board on Human Systems Integration (BOHSI) of the US National Academies of Sciences, Engineering and Medicine.

Jichen Zhu is an Associate Professor of Digital Design at the IT University of Copenhagen, Denmark. She directs the Procedural eXpression Lab (PXL) group and leads the User eXperience (UX) Design Specialization. Her research interest lies at the intersection of human-computer interaction, interaction/game design, and artificial intelligence (AI). Her focus is designing/developing novel human-AI interaction as well as understanding how people interact with AI. Her work has been funded by National Science Foundation (US), National Institutes of Health (US), and Novo Nordic Foundation (Denmark).

References

Van Der Maden, W., Van Beek, E., Nicenboim, I., Van Der Burg, V., Kun, P., Lomas, J. D., & Kang, E. (2023, July). Towards a Design (Research) Framework with Generative AI. In *Companion Publication of the 2023 ACM Designing Interactive Systems Conference* (pp. 107-109).