Colloquium: Science, Technology and Society in Computer Science

18. - 21. May 2026
DHEG136E (Showroom) | Data House, Sandgasse 36, Erdgeschoß

It is a pleasure to invite you to the colloquium for our Professorship in Science, Technology and Society in Computer Science at Graz University of Technology. The public part will be a short teaching sample at Bachelor's level in Computer Science, 3rd semester in "Socio-technical Change", a scientific talk (titles below), and a discussion with the audience.

Sawhney Nitin

18. May 2026 | 09:00 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title:Sandboxing Risk and Participation for Responsible AI in the Public Interest?

Abstract: The public sector has been increasingly embracing algorithmic decision-making, machine learning, and data-centric infrastructures for many essential and often high-risk public services. With the rapid emergence of LLMs and Generative AI systems there has been a renewed thrust to incorporate AI-based models and conversational AI interactions to improve digital services for citizens, rapid decision-making and reducing costs, without critically contending with the greater risks they may pose for inaccuracy, misinformation, breach of privacy or marginalization of its users.

As such 'Public AI Services' become more prevalent and affect citizens' lived experiences, we must critically question their social, political, and ethical implications to examine the rights, risks, and responsibilities for both the providers and recipients of such services, particularly the most vulnerable in society. Diverse discourses around the EU AI Act and other AI regulatory frameworks offer a timely opportunity to examine the emerging public values being incorporated, while engaging multi-stakeholder and citizen participation in shaping them.

In this talk, I begin by rethinking how we go beyond the technical notions of AI safety to engage the sociotechnical realm to devise more inclusive, trustworthy, and responsible AI practices in the public interest. I discuss participatory design of conversational AI systems for supporting collaborative migrant counseling services with municipalities in Finland. We consider the role of AI Regulatory Sandboxes to support responsible development and validation of emerging AI systems in conjunction with stakeholders and regulators in the AI lifecycle. Such sandboxes can foster experimentation, co-learning, and multi-stakeholder participation, particularly in high-risk domains. However, participatory design and sandboxing AI have crucial limitations we must address.

The many exceptions in the EU AI Act permit the use of AI in policing, surveillance and military contexts, and lack of enforceable provisions for potential civil and human rights violations. How should researchers, scholars, government actors, and civil society understand their implications globally to devise critical policies and practices that mitigate societal harms today? We need to rethink how we tackle notions of AI safety, risk, inclusion, and responsible AI in the wider public interest, as an action agenda for future research and pragmatic societal outcomes.

Bio: Nitin Sawhney leads research on Inclusive, Responsible and Human-Centered AI in the Public

Interest. As a Docent appointed at University of Helsinki and the University of the Arts, he works with faculty, postdocs and doctoral researchers on transdisciplinary initiatives at the intersection of science, technology, and society.

Nitin completed his doctoral dissertation at the MIT Media Lab, and served as Assistant Professor of Media Studies at The New School from 2011-2019 and Professor of Practice in the Department of Computer Science at Aalto University from 2020-2025.

At Aalto University, he established the CRAI-CIS (CRitical AI and Crisis Interrogatives) research group for societally-engaged research on responsible AI, Human Computer Interaction and computational social science. He has previously researched speech/audio interaction, wearable computing, distributed open source collaboration, and civic/participatory media at the MIT Media Lab and The New School.

Nitin led several responsible AI projects with public sector partners funded by the Research Council of Finland, including Reconstructing Crisis Narratives for Trustworthy Communication and Cooperative.

Niess Jasmin

18. May 2026 | 14:30 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: The Future of Agency: AI, Human Flourishing, and Democratic Digital Societies

Abstract: Digital technologies increasingly shape how people participate in society, make decisions, and relate to themselves and others. In this talk, I examine agency as a lens for understanding how AI and emerging digital systems reshape responsibility, participation, and human flourishing across everyday, institutional, and societal contexts. Drawing on perspectives from human–computer interaction and science and technology studies (STS), I present my research programme on the social shaping of technology and the design of responsible, human-centred systems. This talk discusses selected examples from my interdisciplinary work on democratic participation, digital (public) health, and AI-mediated interaction, alongside broader questions concerning inclusion, governance, and the future relationship between humans and intelligent technologies.
I also examine how emerging technologies complicate the study of user experience. People may attribute intention or even consciousness to systems such as conversational AI or everyday devices, introducing new forms of ambiguity in human–AI relations. This is illustrated by systems like SelVReflect, a VR environment where users revisit personal challenges through voice-based interaction and the boundary between tool and interlocutor becomes productively blurred, and MoodShaper, a VR experience for emotion regulation that raises questions about how much affective agency users delegate to a computational system. Across domains, perceptions of technology strongly influence trust, acceptance, and behaviour in ways that extend beyond functionality, particularly for technologies that aim to augment human capabilities.
My research programme therefore focuses on combining technical innovation with empirical, theoretical, and ethical inquiry to better account for agency, vulnerability, and long-term societal impact. I advocate for socio-technical design that is democratically informed, socially embedded, and attentive to diverse forms of human experience, so that future technologies can support both individual empowerment and collective well-being in increasingly AI-mediated societies.

Bio: Jasmin Niess is an Associate Professor in Human-Computer Interaction at the University of Oslo, working at the intersection of computer science, social science, and design. Her research focuses on the design and study of interactive systems, with particular attention to AI-driven and data-intensive technologies, and how they shape human behaviour, institutions, and everyday practices. She combines technical and human-centred approaches, with a strong emphasis on empirical, design-based, and interdisciplinary methods, including work in digital public health, democratic technologies, and AI-mediated interaction.
Her work has been recognised with multiple awards from leading HCI venues such as ACM CHI and ACM CSCW, including a Best Paper Award and several Honourable Mentions. She has published extensively in top-tier conferences and has held leadership roles in major international venues. She was selected for the Network of Top Female Researchers at the Faculty of Mathematics and Natural Sciences in Oslo and brings extensive international experience in research, teaching, and interdisciplinary collaboration.

Kowald Dominik

19. May 2026 | 09:00 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: Establishing and Evaluating Trustworthy AI: Bridging Computer Science and Societal Values

Abstract: Artificial intelligence (AI) technologies (re-)shape modern life, driving innovation across a wide range of sectors. However, since technical optimization and societal evaluation often occur in isolated silos, some AI systems have yielded unexpected or undesirable societal outcomes, such as biased recommendation and the unfair treatment of specific user groups. As a result, establishing and evaluating trustworthy AI has become a critical societal challenge. In this talk, I outline my research vision for bridging computer science and societal values by conceptualizing AI as a sociotechnical system and by building upon established Science, Technology and Society (STS) methods such as (multi-)stakeholder involvement, technology assessment, and ELSA (ethical, legal and social aspects) studies. Specifically, I present research results and plans along four pillars: (1) multistakeholder investigations in AI to realize value-sensitive design and evaluation, (2) long-term societal impacts via simulations to study fairness dynamics, (3) ELSA and sustainability in applied AI, and (4) societal aspects of agentic and multi-agent AI systems. Finally, I conclude this talk by highlighting the importance of open science practices in this field, drawing on recent research on AI reproducibility.

Bio: Dominik Kowald is professor for AI-based information retrieval in digital humanities (25%) at the University of Graz as well as head of the research area FAIR-AI at Know Center Graz, one of Europe's leading research centers for trustworthy AI. He holds a venia docendi in Applied Computer Science at the Institute of Human-Centred Computing of Graz University of Technology, where he regularly teaches courses and supervises students. He completed his Ph.D. (with distinction) in October 2017 on psychology-informed recommender systems based on the cognitive architecture ACT-R. Additionally, in June 2024, he completed his habilitation (post-doctoral thesis) on the topic of transparency, privacy, and fairness aspects of recommender systems. Dominik is a key researcher in the Interfaces of Agent-Centric AI FFG COMET module, and in other international research projects. He has published more than 120 papers in interdisciplinary and computer science venues, and his research was presented in several news outlets including DiePresse, APA Science, and DerTrend.

Mager Astrid

19. May 2026| 14:30 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: Collaborative Futuring. From search engine critique to cocreation of digital technologies and practices

Abstract: After years of critique, my research in digital STS has moved towards the question of how to collectively imagine, develop, and govern digital technologies in inter- and transdisciplinary settings. In this talk, I will put the spotlight on three empirical sites to trace how my research gradually shifted from formulating a social science critique of search engines in European contexts towards participatory research on the data welfare state and situated AI ethics in a global world. For each of these examples, I will demonstrate the institutional context of my research, the methodological set-up, and the conceptual contribution to digital STS. This way, we will embark on a journey from algorithmic imaginaries co-producing search engines and Europe, sociotechnical deconstructions of algorithmic profiling in organizational contexts, towards inclusive AI cultures, situated ethics, and epistemic justice. As an outlook, I will give insights into my future research program centering around collaborative future-making in the context of data-driven urban planning, democratizing AI, and grounding young AI practices in school education. With this research, I hope to contribute to more participatory, inclusive, and democratic digital futures – conceptually, empirically, and politically since the constitutive power of future imaginaries takes root in present digital developments, practices, and governance approaches. To conclude, I will show how my work contributes to the Institute of Human-Centred Computing, the Digital STS cluster in Graz, as well as policy and society more largely.

Bio: Astrid Mager currently works as a Senior Academy Scientist at the Institute of Technology Assessment (ITA), Austrian Academy of Sciences (ÖAW), and as a Lecturer at the Department of Science and Technology Studies, University of Vienna. In 2024, Astrid finished her habilitation ‘Algorithmic Imaginaries. Visions and values in the shaping of search engines’ at the University of Vienna (Privatdoz.). Since 2024, she has been Vice President of STS Austria and Vice Chair of the ÖAW Commission Democracy in Digital Societies (DEMGES).

Spiel Katta

20. May 2026 | 09:00 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: Crip Computing — Epistemological Implications of Disabled Standpoints in Technology Research

Abstract: With the EU Accessibility Act having come into effect in 2025, research into how to make (digital) services more accessible and identifying potentials for assistive devices has subsequently become a more urgent matter of concern. In a scramble of efforts, disabled people are often left out of the development processes — leading to outcomes that might not always be appropriate within disability cultures and using limited resources without meeting their targets. This is partly because such technologies are predominantly rooted in a medical model of disability that misses some of the intricacies of the lives of disabled people. Different investigations by the Crip Collective in recent years, though, have challenged not just which technologies are developed by whom but also what worlds might even be worth exploring as desirable. By drawing on this research, I illustrate what kinds of knowledges arise from a decidedly political-relational standpoint of disability.

Bio: Katta Spiel is an Assistant Professor for 'Critical Access in Embodied Computing' at TU Wien. In their interdisciplinary collaborations with disabled, neurodivergent and/or nonbinary peers, they conduct explorations of novel potentials for designs, methodologies and innovative technological artefacts, contributing to different academic fields from Science and Technology Studies to Human-Computer Interaction.
Their work has received several international and national awards, including the SIGCHI 2020 Outstanding Dissertation Award as well as a Förderungspreis der Stadt Wien in 2022. Their research was funded by the European Research Council (Starting Grant 2023) and the FWF (Hertha Firnberg Scholarship 2020; Emerging Fields 2026) among others. They further chair the Independent Monitoring Committee on the Implementation of the UN Convention on the Rights of Persons with Disabilities in Austria.

Kinder-Kurlanda Katharina

20. May 2026 | 14:30 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: Critical Proximity: Studying and Shaping Responsible AI in Practice

Abstract: This talk presents research on changing knowledge practices in data-rich systems across workplaces and research environments, showing how continuous data capture and analysis reorganize epistemic authority and reshape how evidence is produced, interpreted, and used. In workplace settings, the talk investigates technological change and its structural and situational consequences, such as power shifts within organisations, new responsibilities or changed visibility. More recently, my research has focused on social responsibility in relation to bias in artificial intelligence, while also exploring how scientific work is increasingly situated within tensions between commercial platforms, emergent data economies, and the power relations they engender. Knowledge practices are evolving alongside digital data and computational methods, also posing epistemological and hermeneutic questions.

My work advances an approach to researching Science, Technology and Society in Computer Science with a focus on artificial intelligence that is committed to combining interpretive, theory-driven perspectives with practical approaches to shaping sociotechnical configurations. The aim is to establish critical proximity to the objects of study and to collaborate in the development of responsible AI. This orientation includes care for the often-unforeseeable consequences of research, both within interdisciplinary networks and in relation to technical artifacts. At the heart of the research is a commitment to co-developing AI that is ethically reflective, transparent, reliable, and certifiable. I argue that a situated understanding of social contexts of interaction is essential for data-driven learning, both in lived experience and at the societal level. The aim is a transferable framework for actively shaping responsible technology in interdisciplinary processes.

Current and planned work focuses on the development and deployment of large language models in health, critical infrastructure, and recruitment, as well as ethnographic studies of AI use in security and researchers' data practices.

Bio: Katharina Kinder-Kurlanda has been Professor of Digital Culture (Humanwissenschaft des Digitalen) at the University of Klagenfurt in Austria since 2021. From 2016-2021 she was team leader for 'Data Linking & Data Security' at GESIS – Leibniz Institute for Social Sciences in Cologne. Her

academic training includes studies in cultural anthropology, computer science and history at the University of Tübingen and the University of Frankfurt, as well as a doctorate from Lancaster University on the topic of 'Ubiquitous Computing in Industrial Workplaces'. She works across disciplines in science and technology studies, sociology of technology, digital humanities, web science and internet research and serves on the board of STS Austria.

Boeva Yana

21. May 2026 | 09:00 | Showroom (DHEG136E) | Sandgasse 36, Erdgeschoß

Title: Working with Computation: Relational and Responsible Infrastructuring in Knowledge Work Transformations

Abstract: Computation, encompassing algorithms, data-driven methods, and artificial intelligence, has entered many aspects of life with transformative potential, for instance, in science, education, and professional work. The computational turn also challenges existing knowledge, expertise, organizations, and sociomaterial structures. In particular, multidisciplinary and multi-actor knowledge work reveals the relational character and heterogeneous networks of epistemic cultures, actor constellations, and technologies confronted with the sociotechnical transformation through computation. Drawing on empirical and interdisciplinary research into the digital transformation of architectural and engineering practices, as well as the innovation potential of computation for the built environment, this talk introduces the conceptual framework of computational knowledge ecologies. This framework advances understanding of how computing-driven transformations reshape diverse practices, expertise, and professional structures in advanced knowledge work, alongside everyday operations. Engaging with computation is thus intertwined with relational and responsible infrastructuring of emerging human-computer interaction approaches and technologies along established ones, especially through 'software-in-use'. The talk builds upon concepts from science and technology studies on infrastructures and computer-supported cooperative work. It concludes by outlining future research directions for responsible and socially desirable technology development in response to contemporary societal challenges.

Bio: Dr. Yana Boeva is a Junior Research Group Leader at the Institute for Social Sciences and the Cluster of Excellence "Integrative Computational Design and Construction for Transformative Architecture (IntCDC)" at the University of Stuttgart, Germany. She holds a PhD in Science & Technology Studies from York University, Toronto, ON. Her research interests include the critical studies of computation and digital infrastructures, the transformation of professional knowledge, epistemic cultures and practices of design and engineering cultures, and their sociocultural contexts. She has co-led an interdisciplinary research project on the sociotechnical and organizational conditions for implementation of computational methods in architectural design practice (2023–2025). She is currently Co-PI of a research project on human-AI collaborations in review processes for environmental reporting (2026–2027). Her research has been published in Science as Culture, Science & Technology Studies, Digital Culture & Society, and several interdisciplinary journals. She has also co-edited the open-access book "Algorithmic Regimes: Methods, Interactions and Politics" (Amsterdam University Press, 2024) on the changing knowledge regimes in datafied and digital societies. Dr. Boeva is associate editor for the journals Science & Technology Studies and Engineering Studies.