Call for Participation

# Developing Culturally Competent Autonomous Systems through Human-Centered Design Workshop

*Tuesday, 25 July 2023 - 13:30-17:30*

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## Aim of the workshop

The goal of the workshop is to bring together key voices to share research and future directions for the critical challenges of developing culturally competent AI-enabled and autonomous systems using human-centric methodologies. As AI is increasingly leveraged across society in ways that act without human intervention, it is critical to ensure that these systems meet the needs of different cultures and communities.

Research at the Johns Hopkins Institute for Assured Autonomy has identified that the incorporation of community priorities into the development of AI-enabled technologies is a key element in the development of assurance and developing human trust in autonomous systems. There is a critical need for research into scalable human-centered design methodologies to determine community priorities across diverse communities and cultures both during initial design and across the lifecycle of autonomous systems.

# Expected workshop outcome

The two expected outcomes of the workshop are to
1) brainstorm on existing key challenges and potential future research directions, and
2) develop cross-cultural and cross-disciplinary relationships which may lead to future research collaborations.

# Workshop topics

Workshop participants will each be assigned to one of a series of thematically-based small groups. The topics for the small groups will be developed using the broad themes identified amongst selected abstracts. In each small group, participants will engage in facilitated, active brainstorming sessions.

# Workshop agenda

13:30 – Start of the workshop
13:30 – 13:45 Intros & Icebreakers
13:45 – 15:00 Workshop Participant Lightning Talks
15:00 – 15:30 Coffee Break and Networking
15:30 – 15:45 Introduction of Theme-Based Small Group Activity
15:45 – 16:45 Small Group Activity
16:45 – 17:15 Small Group Share Out and Discussion
17:15 – 17:30 Closing
17:30 – End of the workshop

# Guidelines to prospective authors

## Submission for the Workshop

Prospective participants should submit through the HCII Conference Management System (CMS) a 300-word abstract on both existing research and potential future directions in the arena of developing cultural competence of autonomous systems through human-centered design.

## Submission for the Conference Proceedings

The contributions to be presented in the context of Workshops **will not be automatically** included in the Conference proceedings.

However, after consultation with the Workshop Organizer, authors of accepted workshop proposals that are registered for the conference, are welcome to submit through the HCII Conference Management System (CMS), an extended version of their workshop contribution, to be considered for presentation at the Conference and

inclusion in the "Late Breaking Work" conference proceedings, either in the LNCS as a long paper (typically 12 pages, but no less than 10 and no more than 20 pages), or in the CCIS as a short paper (typically 6 pages, but no less than 4 and no more than 8), following peer review.

The submission deadline for the camera-ready papers (long or short) for the "Late Breaking Work" Volumes of the Proceedings is the 23rd of June 2023.

## Workshop deadlines

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| Submission of workshop proposals | 8 May 2023 |
| Notification about submission acceptance | 22 May 2023 |
| Final workshop agenda and materials disseminated to participants | 31 May 2023 |
| Finalization of Workshop organization and registration of participants | 31 May 2023 |

## Workshop organizers

**Cara LaPointe:** A futurist who focuses on the intersection of technology, policy, ethics, and leadership, Cara is the co-director of the Johns Hopkins Institute for Assured Autonomy, which works to ensure that autonomous systems are safe, secure, and trustworthy as they are increasingly integrated into every aspect of our lives. She was previously a senior fellow at Georgetown University's Beeck Center for Social Impact + Innovation, where she created the "Blockchain Ethical Design Framework" as a tool to drive social impact and ethics into blockchain technology. Cara believes that everyone should have a voice in the development of technology, including traditionally marginalized and vulnerable populations.  https://iaa.jhu.edu/people/dr-cara-e-lapointe/

**Sarah Rigsbee:** Sarah is the Human-Centered Design Strategist Lead at the Institute for Assured Autonomy.  Rigsbee leads work in the areas of systems and design thinking, human-centered design, and innovation strategy, where she leads diverse teams through designing and developing solutions to address various user and sponsor needs.  She leverages human-centered design methods to solve complex challenges for a range of users in a variety of different domain and challenge areas. She is also an experienced design strategist, data analyst, and human system engineer, and likes to apply her technical background and human-centered focus to solving challenges and improving the intersection of the human and the machine. https://iaa.jhu.edu/people/dr-sarah-rigsbee/

**Alexis Basantis:** Lexi is a Human-Centered Design Strategist at the Johns Hopkins Applied Physics Laboratory (JHU/APL). In her role, she utilizes human factors engineering and user-centered design principles to better integrate the human perspective into the design and development of complex technical landscapes. She believes that empathy, humility, and storytelling are integral skills for developing innovative and impactful user-focused solutions. https://iaa.jhu.edu/people/alexis-basantis/

## Useful links and References

- https://iaa.jhu.edu/
- https://techpolicylab.uw.edu/project/diverse-voices/
- https://tas.ac.uk/
- https://hai.ischool.utexas.edu/
- https://bridgingbarriers.utexas.edu/good-systems
- Young, M., Magassa, L., Friedman, B. "Toward inclusive tech policy design: a method for underrepresented voices to strengthen tech policy documents" *Ethics and Information Technology.* https://techpolicylab.uw.edu/wp-content/uploads/2019/03/TowardInclusiveTechPolicyDesign.pdf
- Lee, Min Kyung, et al. "WeBuildAI: Participatory framework for algorithmic governance." *Proceedings of the ACM on Human-Computer Interaction* https://dl.acm.org/doi/abs/10.1145/3359283
- Bruno et al. "Paving the Way for Culturally Competent Robots: a Position Paper" *2017 26th IEEE International Symposium on Robot and Human Interactive Communication*. https://arxiv.org/pdf/1803.08812.pdf
- Prabhakaran, V., Qadri, R., Hutchinson, B. "Cultural Incongruencies in Artificial Intelligence" *Workshop on Cultures in AI/AI in Culture.* 2022. https://arxiv.org/abs/2211.13069

## Registration regulation

Attendance in the workshops will be available as 'in-person' only. Workshops are 'closed' events, i.e. only authors of accepted workshop proposals, registered for the specific workshop, will be able to attend.

A registration fee of $75 is applicable for workshop participants. Workshop participants who wish to attend the Conference will need to also register for the Conference.

The total number of participants per workshop cannot be less than 8 or exceed 25.