

HCI for Climate Change: Imagining Sustainable Futures

Eleonora Mencarini*
Fondazione Bruno Kessler, Trento,
Italy
mencarini@fbk.eu

Christina Bremer
Lancaster University, Lancaster,
United Kingdom
c.bremer@lancaster.ac.uk

Chiara Leonardi
Fondazione Bruno Kessler, Trento,
Italy
cleonardi@fbk.eu

Jen Liu
Cornell University, New York, U.S.A.
jenliu@infosci.cornell.edu

Valentina Nisi
ITI / LARSyS, Instituto Superior
Técnico, U. Lisbon
valentina.nisi@tecnico.ulisboa.pt

Nuno Jardim Nunes
ITI / LARSyS, Instituto Superior
Técnico, U. Lisbon
nunojnunes@tecnico.ulisboa.pt

Robert Soden
University of Toronto, Toronto,
Canada
soden@cs.toronto.edu

ABSTRACT

As the climate crisis is turning into one of the most critical issues of our time, HCI researchers keep reflecting on the role their work can play in reducing the impact of adverse environmental changes. Suggestions have been made to expand Sustainable HCI (SHCI)'s intervention area to policy design to have a larger impact, consider non-human actors' perspective to incorporate the value of biodiversity, develop multidisciplinary competencies and work across disciplines to understand climate change, and finally make it understandable to citizens and pave the way for their action. This workshop calls to discuss the different angles from which the problem of climate change has been addressed by the CHI community so far. We believe these different angles have several contact points, and the convergence of these different perspectives would help HCI researchers better imagine sustainable futures.

CCS CONCEPTS

• HCI theory, concepts and models; • Sustainability;

KEYWORDS

Climate change, Environmental data, Future scenarios, More-than-human, Policy Design, Social Justice, Sustainability

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*Main contact person

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1 BACKGROUND

As the climate crisis is turning into one of the most critical issues of our time, HCI researchers keep reflecting on the role their work can play in reducing the impact of adverse environmental changes. In this one-day workshop, we aim to convene the CHI community to discuss how HCI can address issues related to climate change from different angles.

Sustainable HCI (SHCI) has long focused on exploring how digital technologies raising awareness and fostering a more sustainable lifestyle among individuals can help tackle the environmental crisis [8, 11]. However, keen to make a difference, recent contributions in the CHI community are questioning and reframing the efficacy of leveraging the behavior of individual consumers to impact the environmental crisis and suggest SHCI a shift of focus. On the one hand, suggestions have been made to restrict the focus, tackling climate change as a priority rather than considering the whole spectrum of environmental issues [13] and exploiting existing and consolidated HCI skill sets to tackle the crisis [4]. On the other hand, scholars advocate for expanding the focus from individual consumers to policymakers and policy design to have an impact at a larger scale [4, 20] and considering new perspectives in the discourse on climate change by collaborating with a wider range of stakeholders, including non-human actors [5].

Acknowledging the interconnections among different species challenges the existing anthropocentric and growth-centered perspectives [15]. This view calls for adopting a more-than-human approach to help SHCI researchers understand better the uneven impacts of the changing planet as it affects both human and non-human communities and extend their perspective on climate change risks by incorporating the value of biodiversity, other “non-market” assets and the experiences of communities already experiencing climate change first-hand [22].

Understanding the climate change phenomenon (i.e., its causes, dynamics, and impacts) is the basis for action and implies dialoguing with other disciplines and democratizing data. Since most climate change discourse occurs outside HCI [21], HCI researchers are called to develop multidisciplinary competencies and work across disciplines [14] to understand the phenomenon first and then make