



**MENSCH** UND  
**COMPUTER 2021**  
Aufbruch in eine neue Zukunft

Stefan Schneegass, Bastian Pfleging, Dagmar Kern (Hrsg.)

# TAGUNGSBAND

MENSCH &  
COMPUTER  
2021



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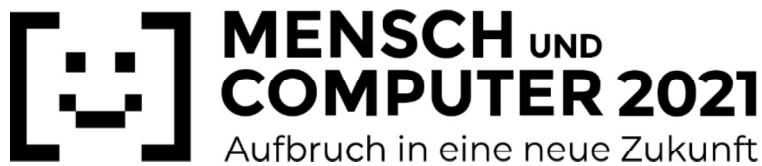
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**Welcome to MuC'21, the Conference on Mensch und Computer 2021, held from September 5th to 8th at the Technische Hochschule Ingolstadt, Germany!**

We are in the middle of an overall societal transformation process that is not only driven by digitization. The entire information society is facing radical changes, especially because of the (renewed) rise of artificial intelligence and its application in numerous areas. The recent COVID19 crisis has also shown us that “more, more, more” is not a sustainable model. A return to the essentials, a focus on what is necessary, but at the same time a renewal through joint human-computer symbiosis (as Paul Fitts so appropriately described it in the 1950s with “Humans are better at” – “Machines are better at”) and a dialogue engaged at eye level as well as a mutual understanding of humans and technology are necessary to meet the demand for a healthier, more sustainable life.

In order to initiate this process, we have chosen an appropriate theme for the “Mensch und Computer 2021” conference: “Rise into a new future” (in German: “Aufbruch in eine neue Zukunft”). MuC 2021 is being hosted by a (technical) university of applied sciences for the first time since 2006. Ingolstadt was not chosen as the venue by chance: THI is one of the most innovative and research-intensive HAWs in Germany and is ideally suited to unite the various disciplines under one roof. Since 2016, Ingolstadt University of Applied Sciences has been operating CARISSMA, the leading scientific center for vehicle safety, the first research building at a university of applied sciences in Germany, where it conducts research on new, innovative concepts for safeguarding automated driving, electromobility and sustainable transport, but also addresses human factors such as trust in (automated) technology, technology acceptance and ethical decision-making as a cross-cutting issue. With a large governmental-funded transfer project „Mensch in Bewegung“ (the similarity to the conference motto is not coincidental), the understanding of the opportunities, but also of the risks of technology and automation is to be further transported to the public via a wide variety of formats.

THI is home to the Bavarian AI Center for Mobility and bundles its activities in the field of artificial intelligence in AININ (Artificial Intelligence Network Ingolstadt gGmbH). In AININ, partners from science, business and society have joined forces to conduct interdisciplinary research on forward-looking topics in artificial intelligence and machine learning in the fields of business, health, production, and mobility. THI also operates a Fraunhofer Application Center for Networked Mobility and Infrastructure, which is linked to the Fraunhofer IVI in Dresden. However, it is not only in research that the topic of health from an AI perspective is becoming increasingly important. In teaching, too, the new field of study “Health and Life Sciences” will be successively established across all faculties as a cross-cutting topic with numerous courses of study starting in the winter semester 2020/21. Research professorships and cooperation with the hospital in Ingolstadt ensure that research and teaching are closely interlinked.

In this highly dynamic environment, the conference “Mensch und Computer 2021” will take place in Ingol-

stadt in September 2021. The goal of the four-day conference is to discuss research findings, promote the exchange of information between academia and professional practice, raise awareness of the relevance of human- and task-oriented technology design in academia, business and the public, and stimulate research activities and training in this area. The organizers of the conference are based at the Faculty of Computer Science. Simon Nestler is a professor for Human-Computer Interaction and member of the presidium of the Gesellschaft für Informatik e.V., Andreas Riener is a professor for Human-Computer Interaction and Virtual Reality, leads the User Experience Design (BA, MA) courses at THI, heads the interdisciplinary Human-Computer Interaction Group, and is chair of the German ACM SIGCHI chapter. This year, 79 full papers were submitted, of which 30 were accepted (acceptance rate: 38%). Despite the difficult conditions, this year's submissions are in line with the average of the last three years (2018: 63, 2019: 104, 2020: 74 submissions). For the other conference tracks, we were able to accept 39 of 77 short papers (acceptance rate: 50%) and 10 of 12 demos submitted. As in previous years, the scientific contributions to MuC'21 will be published in the ACM Digital Library, ensuring high visibility in the international community. In addition, all accepted contributions will be available in open access via the Digital Library of the GI Department of Human-Computer Interaction.

The conference “Mensch und Computer” (MuC), the largest HCI event in Germany, is organized entirely on a voluntary basis by our community. The unique aspect of the conference is that it combines a research and a practice track and thus promotes inter- and transdisciplinary exchange in a special way. As general conference co-chairs, we asked people to take on various, often very time-consuming tasks. We were very pleased to be able to build a great MuC'21 team with over 40 volunteers from the GI and the German UPA. Over the last year, the team has worked with enthusiasm and creativity to make MuC'21 a successful event despite the difficult conditions. Together we have considered, discussed, and struggled over what MuC'21 could look like in these special times. The entire organizing team has worked very hard to make MuC a great conference with high impact and visibility in Germany and beyond. The team took care of all the important things and small details that make conferences successful: Managing the program, reviewing, selecting and organizing sessions, ensuring accessibility, developing a conference design, organizing the workshops, planning the PhD colloquium and poster and demo sessions, ensuring publication logistics, providing on-site technology, planning the social event, dealing with student volunteers, and registering all participants.

We are impressed with the dedication of each and every member of the MuC Organizing Committee and thank them all very much!

We hope you all enjoy the hybrid experience at Mensch und Computer 2021.

Andreas Riener and Simon Nestler  
MuC'21 General Conference Co-Chairs



# Organizing Committee

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**Andreas Riegler**, FH Oberösterreich, Campus Hagenberg, Austria

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