

Introduction to the AI and the Future of Work Minitrack

Triparna de Vreede
University of South Florida
tdevreede@usf.edu

Xusen Cheng
Renmin University of China
xusen.cheng@ruc.edu.cn

Dominic Siemon
 LUT University
Dominik.Siemon@lut.fi

Developments in Artificial Intelligence (AI) are setting the stage for a paradigm shift in the workplace. According to PwC, 72% of business executives say that AI will give them a competitive advantage in the future (Bothun, Liebermann, & Rao, 2017). In fact, in many ways the future is already here. Several repetitive and simple tasks that were typically performed by humans are now being automated by AI bundled with other technologies, such as cloud systems, augmented reality, (social) robots, IoTs, and wearables. Consequently, the ratio of tasks executed by machines to humans is dramatically shifting. Human workers are rapidly being replaced with AI on many fronts. For instance, in 2018 an average of 71% of total task hours were performed by humans compared to 29% accomplished by machines. However, this average is expected to shift dramatically in the near future with 58% of tasks hours expected to be performed by humans and the remaining 42% to be handled exclusively by machines by 2022 (World Economic Forum, 2018).

In a world of such rapid technological changes, it is paramount to have an overview of the research being conducted in this discipline. An understanding of current developments of AI and associated technologies enables us to envision the future workplace and its effect on human employees. These insights also provide guidance to employees, teams, organizations, and governments in creating a sustainable and synergistic workplace. Further, engaging in this research allows us to proactively counter any negative effects that may arise from the changes in the work settings. Through this minitrack, we hope to create a platform where researchers working on AI in the context of future of work can come together and collaborate to contribute to our knowledge base.

This minitrack focuses on the impact of AI on the various aspects of the workplace as it exists currently as well as how it may evolve in the future. We host papers that address the social, technical, behavioral, attitudinal, emotional, or managerial aspects of AI in the workplace. The unit of analysis can be individuals, teams, or organizations. The research focus can range from the impact of AI on work and its related aspects to the design considerations of AI in the workplace. In short, this minitrack highlights research that may influence the future of work and act as a springboard for new ideas and innovations in AI that will be disruptive to the workplace.

The first minitracks at HICSS-54 and HICSS-55 were highly successful and attracted several submissions despite

the pandemic. This year's minitrack attracted a record number of submissions, from which the following eight papers were selected for presentation at the conference:

- AI Literacy - Towards Measuring Human Competency in Artificial Intelligence, by Marc Pinski and Alexander Benlian
- Approaches to Improve Fairness when Deploying AI-based Algorithms in Hiring – Using a Systematic Literature Review to Guide Future Research, by Jonas Rieskamp, Lennart Hofeditz, Milad Mirbabaie, and Stefan Stieglitz
- “I Felt Like I Wasn't Really Meant to be There”: Understanding Women's Perceptions of Gender in Approaching AI Design & Development, by Kelsea Schulenberg, Allyson I. Hauptman, Elizabeth A. Schlesener, Heather Watkins, and Guo Freeman
- Conversational Agent as a Black Hat: Can Criticising Improve Idea Generation?, by Izabel Cvetkovic, Valeria Rosenberg, and Eva Bittner
- Accepting the Familiar: The Effect of Perceived Similarity with AI Agents on Intention to Use and the Mediating Effect of IT Identity, by Naif Alawi, Triparna de Vreede, and Gert-Jan de Vreede
- Artificial Intelligence and Digital Work: The Sociotechnical Reversal, by Louise Fischer, Nico Wunderlich, and Richard Baskerville
- Artificial Socialization? How Artificial Intelligence Applications Can Shape A New Era of Employee Onboarding Practices, by Eva Ritz, Fabio Donisi, Edona Elshan, and Roman Rietsche
- Fairness in Algorithmic Management: How Practices Promote Fairness and Redress Unfairness on Digital Labor Platforms, by Laura Schulze, Manuel Trenz, Zhao Cai, and Chee-Wee Tan

References

- Bothun, D., Liebermann, M., and Rao, A. (2017) “Bot.Me: A revolutionary partnership. How AI is pushing man and machine closer together.” Consumer Intelligence Series PwC. <http://pwcartificialintelligence.com/>
- World Economic Forum. (2018). “The future of jobs report 2018”. Geneva: World Economic Forum. http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf