Prof. Holger H. Hoos, RWTH Aachen University

Beyond the hype: The promise and peril of artificial intelligence

Recent progress in artificial intelligence has elevated what used to be a highly specialised research area to a topic of public discourse and debate. Some leading experts are warning of existential risks associated with the development of AI systems, while others see them usher in an era of unprecedented prosperity. Investors, governments and public institutions are pouring billions into AI research and innovation, and legislators are feverishly working towards regulating the design and use of AI systems. But how much of this is hype, and how much needs to be taken seriously? In this talk, I will explain how and why AI will have transformative impact on all sciences and engineering disciplines, as well as on most aspects of our daily lives. I will discuss the fundamental strengths, weaknesses and limitations of current AI systems, along with the most serious risks of deploying these systems quickly and broadly. Finally, I will share some thoughts on what needs to be done in order to manage the risks associated with AI technology, and to realise the benefits it can bring.

Holger H. Hoos holds an Alexander von Humboldt professorship in AI at RWTH Aachen University (Germany), as well as a professorship in machine learning at Universiteit Leiden (the Netherlands) and an adjunct professorship in computer science at the University of British Columbia (Canada). He is a Fellow of the Association of Computing Machinery (ACM), the Association for the Advancement of Artificial Intelligence (AAAI) and the European AI Association (EurAI), past president of the Canadian Association for Artificial Intelligence, former editor-in-chief of the Journal of Artificial Intelligence Research (JAIR) and chair of the board of CLAIRE, an organisation that seeks to strengthen European excellence in AI research and innovation (claire-ai.org).

Holger is known for his work on machine learning and optimisation methods for the automated design of high-performance algorithms and on stochastic local search, he has developed - and vigorously pursues - the paradigm of programming by optimisation (PbO); he is also one of the originators of the concept of automated machine learning (AutoML). Holger has a penchant for work at the boundaries between computing science and other disciplines, and much of his work is inspired by real-world applications.

Registration

Please register here by Wednesday August 23, 2023 or send an email to facultyclub@ers.rwth-aachen.de

Please note that a contribution of 15 Euro for lunch snack and beverages will be requested on site. Based on your registration, we place a binding order with the catering company. We therefore ask for your understanding that the cost contribution is due unless you cancel your registration at the latest by noon of the previous day.