University of Cyprus
Department of Electrical and Computer Engineering

Seminar Series: Fall 2023/24

Bias in Data and Algorithms: Problems, Solutions and Stakeholders

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Wednesday, 29 of November 2023, 17:00-18:00

Room: XOD 02 (In the basement) – **B 107**

Location: https://goo.gl/maps/fNWanm9Gk3PL5XTu7

Abstract: Mitigating bias in algorithmic processes and systems is a critical issue drawing increasing attention across research communities within the computer and information sciences. Given the complexity of the problem and the involvement of multiple stakeholders – not only developers, but also end-users and third parties – there is a need to understand the landscape of the sources of bias, as well as the solutions being proposed to address them. In this talk, I present insights from a survey of 300+ articles across four domains (Machine Learning, Information Retrieval, Human-Computer Interaction, and Recommender Systems) in which a critical mass of work relating to algorithmic bias has been produced, with the aim of providing a "fish-eye view" of the field. In the second part of the talk, I will discuss examples of our ongoing work on auditing proprietary computer vision systems for social biases, positioning this work vis-à-vis the aforementioned framework as well as the emerging science of *machine behavior.*

Biography: **Jahna Otterbacher** (Ph.D., University of Michigan at Ann Arbor, USA) is Associate Professor and Vice Dean of the School of Pure and Applied Sciences at the Open University of Cyprus (OUC). At OUC, she leads the Cyprus Center for Algorithmic Transparency (CyCAT), which conducts interdisciplinary research focused on promoting technical and educational solutions for promoting AI transparency and literacy. Concurrent to this, Jahna co-leads the Fairness and Ethics in AI-Human Interaction (fAIre) group at CYENS, a new center of excellence and innovation in Nicosia, Cyprus. Her research has been funded by the EU's Horizon 2020 Research and Innovation Program (under Grant Agreements No. 739578 (RISE) & No. 810105 (CyCAT)), as well as the Cyprus Research and Innovation Foundation (under grants EXCELLENCE/0918/0086 (DESCANT) and EXCELLENCE/0421/0360 (KeepA(I)n)). Since 2022, she is included on the Stanford-Elsevier list of the world's most-cited scholars (in the area of artificial intelligence – image analysis).