UNIVERSITÀ DEGLI STUDI DI BARI ALDO MORO

Seminar Announcement

DIPARTIMENTO DI INFORMATICA

The Seminars on "Information Technology Outlook" – PhD Programme in Computer Science and Mathematics

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Tuesday November 8, 2022
13:30-15:00

Aula Hume – 2nd floor
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Human-centred AI in Education should be about Interaction and less about Algorithms

In 1997 Peter Wegner wrote a famous paper in CACM entitled "Why interaction is more powerful than algorithms". He argued for a paradigm shift in computer science (CS) built around the unifying concept of interaction by emphasizing the unpredictable nature of human interaction and pointing out that most CS systems are interactive. Nevertheless, algorithms prevail in our times, as teachers use advanced AI tools such as automatic speech recognition and concepts such as computational thinking when teaching young children. Following Wegner, and using AI tools as example, I argue human-centred AI (HCAI) should be built around the concept of interaction. I will highlight the strengths of interaction and the shortcomings of algorithms in some HCAI systems: 1) EssayCritic: automated feedback on English essays using machine learning, 2) interaction scenario of HCAI agents in block-based programming, and 3) the role of teachers as meta-designers.

Anders Morch is a Professor in Technology and Learning at the Faculty of Educational Sciences, University of Oslo, Norway. He has a PhD in Informatics and an MS in Computer Science. His main research interests are in the intersection of end-user development (EUD) and computer-supported collaborative learning (CSCL) and in general to understand how tools and artefacts help people learn together. More specifically, programming and maker spaces in schools, computer-based scaffolding, design-based models of collaborative learning, and 3D virtual worlds. More info: https://www.uv.uio.no/iped/english/people/aca/andersm/index.html