ARTIFICIAL AND HUMAN INTELLIGENCE

FORMAL AND COGNITIVE FOUNDATIONS FOR HUMAN-CENTRED COMPUTING

DIGITAL ECAI 2020 / Tuesday Sep 8 — 12:00 to 18:30 URL / www.codesign-lab.org/ecai2020

WORKSHOP CHAIR / MEHUL BHATT (ÖREBRO UNIVERSITY, SWEDEN - CODESIGN LAB)

Please note that there are two separate links for joining the virtual meeting room of the workshop:

Workshop Part I (I2:00 - I3:40 CET)
Zoom Link: https://rebrand.lu/ai-human-I

• **Short Break** (13:40 - 14:00)

Workshop Part II (14:00 - 18:30)
Zoom Link: https://rebrand.ly/ai-human-2

!! We request you to please **arrive a few minutes before** the start of the sessions; also, if possible, please ensure that your **video camera is enabled** in order to ensure a face-to-face interaction. !!

TUESDAY SEPTEMBER 8 2020

12:00 - 13:40 / JOINT-WORKSHOP OPENING (Session I)

12:00 - 12:10

Workshop on: "Computational Argumentation and Cognition"

— Emmanuelle Dietz (TU Dresden, Germany), Loizos Michael (Open University of Cyprus, Cyprus), and Antonis Kakas (University of Cyprus, Cyprus)

12:10 - 12:20

Workshop on: "Artificial and Human Intelligence: On Formal and Cognitive Foundations for Human-Centred Computing"

Mehul Bhatt (Örebro University, Sweden - CoDesign Lab)

12:20 - 13:10

Order out of Chaos: A Systematic Approach to the Evaluation of Natural Language Argumentation

Martin Hinton (University of Lodz, Poland)

13:10 - 13:40

Commonsense Reasoning for Autonomous Driving

Jakob Suchan (University of Bremen, Germany)

13:40 - 14:00 / BREAK AND END OF JOINT WORKSHOP SESSION

14:00 to 15:30 / SESSION II

14:00 - 14:30

Knowledge Re-Combination and Invention as Key Features for Commonsense Reasoning and Computational Creativity Research

Antonio Lieto (University of Turin - ICAR-CNR, Italy)

14:30 - 15:00

Intention Attribution in Human Interaction with Autonomous Systems — Tom Ziemke (Linköping University, Sweden)

Deep Semantics: Integrating AI and Vision for (Declarative) Reasoning about Space, Action, and Motion

— Mehul Bhatt (Örebro University, Sweden)

[Cancelled, but some aspects of this talk will be discussed during the Focus Group at 17:00]

15:00 - 15:30

Robotics in Context

- Tom Williams (Colorado School of Mines, United States)

15:30 to 15:45 / SHORT BREAK

15:45 to 16:45 / SESSION III

15:45 - 16:15

Autism, AI, and Visuospatial Thinking: Understanding Cognitive Strengths through Computational Modeling and Behavior Analytics

- Maithilee Kunda (Vanderbilt University, United States)

16:15 - 16:30

The Complexity of Multimodal Interaction: On Human-Factors in (Autonomous) Driving

— Vasiliki Kondyli (Örebro University, Sweden)

16:30 - 16:45

High-Level Event Segmentation: Towards a Systematic Model for Mixed-Methods Research in AI and Visual Perception

Vipul Nair (University of Skövde, Sweden)

Continued...

16:45 to 17:00 / SHORT BREAK

17:00 to 18:30 / SESSION IV: FOCUS GROUP

Multimodal Rhetoric and Visuoauditory Media Studies:

— On the Role of Cognition and AI

This session will address multimodality in the social media space, focussing on methodological issues related to computational cognitive vision, multimodal interaction, and visuospatial sensemaking as applicable in diverse contexts relevant to social sciences, (digital) humanities, and cognitive psychology. We particularly address the role that AI can serve in these contexts and reflect on recently commenced / ongoing interdisciplinary initiatives in the EU addressing these questions.