Joint ELISE/Humane AI Call for collaborative projects

HumanE AI net has been running a program of micro-projects and there is a potential to link this with the ELISE mobility program. This is a call for joint proposals that link these two projects and programs.

Project proposals should have a small setup in which 1 or more researchers are financed through HumaneAI micro-project funds and one or more through the ELISE mobility program, specifically under the ELLIS programs, *Human-centric Machine Learning* and *Semantic, Symbolic and Interpretable Machine Learning*, though potentially drawing on other ELLIS programs as well. The ELISE Fellow Mobility rules apply, as specified on the ELISE website, including the eligibility criteria, reimbursement rules and application process. The team should work together to produce a paper, dataset or proof of concept system, preferably co-located or at least partially co-located. The proposal should specify a timeframe for the start date of the project and a completion deadline of at most six months from the project start.

The focus of the call is on 'Collaborative Artificial Intelligence' as described in Section 3.1 of the updated Humane AI Research Agenda (see HAI-Net-Deliverable-D6.1.pdf (humane-ai.eu)). We are interested in projects that develop both theoretical models and practical demonstrations of AI systems able to interact among themselves or with humans through representations that are understandable and meaningful to humans. We anticipate that this will require unpacking the black box to provide a compositional structure that can be used to 'explain' or 'justify' the opinion expressed by the AI system. Such representations might be structured in terms of so-called 'narratives' that can link elements of a situation to previously encountered themes or schemas but could be simpler structures or be based on natural language. While this is not the traditional approach taken towards explainable AI (XAI), it clearly places XAI as an enabler of collaborative AI, a focus that gives a different emphasis and aim to XAI.

Projects could also explicitly develop new theoretical models for multi-agent collaboration and/or compositionality of learning systems. This could include ways of representing and using uncertainty estimates in order to combine evidence for a particular hypothesis that is communicable. Collaboration of any kind requires communication between agents in order that they can coordinate their roles and the division of tasks as well as conveying information pertinent to the execution of those tasks. While not restricted to this topic preference will be given to proposals that are able to advance our understanding of how artificial systems can coordinate their actions among themselves and/or with humans in a human understandable fashion.

Applications are approved on a first-come-first-served basis and the call will be open as long as there is funding available during the lifetime of the projects. However, we encourage early applications as we are planning to hold a hybrid workshop/panel on September 23, 2022, as part of an AIDA ICT48 event and would ask approved projects to give short presentations and participate in the workshop.

Applications should be made to both networks using the same title and description and referencing that the request falls under the joint ELISE/Humane AI call. The ELISE application should be made through Researcher-Mobility (elise-ai.eu), while the Humane AI application should be made through this form. If you have any queries concerning the call, please contact elise-travel@ciirc.cvut.cz (ELISE) or John Shawe-Taylor on jst@cs.ucl.ac.uk (Humane AI).