

Thomas Bolander and Ron Petrick

Edinburgh, 26 October - 2 November 2016

Report for SICSA

Dr Thomas Bolander visited the University of Edinburgh and Heriot-Watt University from 26 October - 2 November 2016, generously sponsored by SICSA. The main goal of the visit was to establish a collaborative research agenda with the host, Dr Ron Petrick. During the stay, Dr Petrick and Dr Bolander identified a set of topics for potential research collaboration: 1) degrees of belief and conditional beliefs in epistemic planning; 2) planning for instruction giving and instruction taking; 3) action model learning in the context of planning in general and epistemic planning in particular; 4) development of a simulation platform for multi-agent epistemic planning where each agent can either be an epistemic planning agent or a human agent controlling an avatar. Dr Petrick and Dr Bolander also outlined a plan for submitting a research proposal to EPSRC in 2017 on a subset of these topics, centred around topic 4. Dr Petrick will also visit Dr Bolander in Copenhagen in early 2017 to finalise this proposal.

Dr Bolander gave two talks during his visit to Edinburgh. The first talk on Friday, 28 October was held in the Informatics Forum at the University of Edinburgh. The topic of the talk was Epistemic Planning With Implicit Coordination, presenting a new type of epistemic planning with potential applications to topic 2 above. The second talk was held on Tuesday, 1 November at Heriot-Watt University, as part of the Heriot-Watt Computer Science Seminar Series. This talk was entitled Qualitative Learning of Action Models, and addressed aspects of 3 above. Both talks lead to interesting discussions with the participants and new pointers for related research.

All in all, Dr Bolander's visit was very fruitful for both the visitor and the host. It was firmly established that even though Dr Petrick and Dr Bolander have different approaches to epistemic planning, and use slightly different formalisms in their work, they are nevertheless motivated by the same types of problems. Hence, a more formalised and technical research collaboration between the two is bound to be advantageous for both, and create interesting and valuable synergies for the area of epistemic planning as a whole.