Candidates are sought for a funded PhD position in Human-Machine Teaming in the Agents, Interaction, and Complexity Group, in the Department of Electronics and Computer Science at the University of Southampton. The position is funded for a period of 3 years by AXA Research, EPSRC, and Thales UK.

About the Project

The PhD position is associated with an iCASE studentship with Thales and an AXA Research Award on Responsible AI and will focus on the development of algorithms and decision support tools for human-machine teaming. This includes developing machine learning algorithms, multi-agent coordination techniques, and human-machine interfaces to enable humans to interact with software agents or robots in ways that maximise the performance of a team of such actors. The project will also look at developing methodologies to develop machine learning systems in ways that are understandable to users (i.e., their limitations and capabilities) and to ensure that they do not cause harm in edge cases.

The PhD student will be encouraged to collaborate with peers in the group and develop a wide range of skills including project management, mentoring of interns, and presentation skills. They will also be expected to present their work at major international conferences and participate in events linked to the newly formed Centre for Machine Intelligence at Southampton.

The student will be supervised by Prof Sarvapali Ramchurn (Turing Fellow and Director of the Centre for Machine Intelligence – www.sramchurn.com ) and Dr Danesh Tarapore (www.daneshtarapore.com). The iCASE studentship also offers the opportunity to be partly based within Thales UK (Autonomous Systems group).

About the Agents, Interaction, and Complexity Research Group

The group has over 35 members and is rated as world-leading (according to REF) in the areas of agent-based computing, human-agent interaction, and multi-agent systems. Members of the group have won several awards at IJCAI, AAMAS, and publish in high quality Artificial Intelligence and Machine Learning venues. The group brings together researchers from a wide variety of both theoretical and practical backgrounds. It also has a strong ethos of applications-driven research, with a particular focus on disaster management, smart energy systems, precision healthcare, and smart transportation systems.

The group also regularly organises social activities (e.g., paintballing, football, charity-related activities) and encourages student-led events and outreach.

The group is part of the School of Electronics and Computer Science and affiliated with the Alan Turing Institute, providing access to the resources and network of the Institute through its fellows programme. This includes access to data study groups and interest groups at the Turing.

More information
The position comes with funding for UK/EU students and potentially for an international student as well (depending on funding availability). This will include fully paid fees and living stipend.

Please contact Prof Sarvapali (Gopal) Ramchurn at sdr1@soton.ac.uk or Dr Danesh Tarapore (d.s.tarapore@soton.ac.uk) for details on how to apply for this position. [www.southampton.ac.uk/postgraduate/pgstudy/howdoiapplypg.html](http://www.southampton.ac.uk/postgraduate/pgstudy/howdoiapplypg.html)