Research Topic- Human and activity detection in ambient assisted living scenarios

Our previous work in ACCOMPANY project (accompanyproject.eu) and recent collaboration with the North Hertfordshire County Council, focuses on person and activity detection in ambient assisted living scenarios. The next natural progression in this work is to improve on the technological readiness of systems for deployment in supervised and unsupervised settings. This involves working on detection algorithms fidelity, as well as user interfaces for the triad of care, the person under care, their relatives and the service provider. The goal here is to detect people and objects and what people do with objects. This then serves as a repository of activities that are automatically detected in support of independent living. The PhD involves both elements of robotics and artificial intelligence, thus to enable accurate detection of activities in a robot-mediated interaction scenario.

Requirements: Applicants should have a very strong first degree or (preferably) a Master's degree in Cybernetics, Computer Science, Electronics, or other relevant area, Candidates are expected to have very good programming skills and prior experience in using ambient sensors and mobile robotic devices. Experiences in multisensory fusion is a bonus.

Informal contact before application: the PhDs will be conducted under Prof Farshid Amirabdollahian's supervision and candidates are invited to contact f.amirabdollahian2@herts.ac.uk.