Identifying and resolving the ethical challenges of the use of AI and robotics in supporting elderly people in the community

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This project sits within the ACRC Academy, a dedicated Centre for Doctoral Training, co-located with the Advanced Care Research Centre (ACRC), a new multi-disciplinary research centre at the University of Edinburgh. The ACRC’s students will deliver key aspects of the ACRC research agenda through a new doctoral-level research and training programme that will also equip them for careers across a wide range of pioneering and influential leadership roles in the public, private and third sectors.

The PhD with Integrated Study in Advanced Care is a novel, structured, thematic, cohort-based, programme of 48 months duration. Each PhD research project within the Academy has been devised by a supervisory team comprising academic staff from at least two of the three colleges within the University of Edinburgh. Each annual cohort of around twelve will include students with disciplinary backgrounds spanning from engineering and data science to humanities, social science, business and commerce, social work, medicine and related health and care professions. This unique level of diversity is a key attribute of our programme.

Project:

Aim

The project will investigate the ethical challenges, and their contingencies and potential resolution, of the application of AI/robotics to social and health-care and offer a human-mediated framework for their mediation and/or resolution

Objectives

The project will aim to develop and test an ethical framework for the design and implementation of emergent new technologies, such as Artificial Intelligence (AI)/robotics, in the support of vulnerable elders in the community.

The project will:

- Explore the existing literature on AI/robotics and social/health-care so as to establish a conceptual framework, and to identify the future trends in the field,
- Identify the key ethical challenges that these trajectories and challenges in practice,
- Carry out empirical research to explore these challenges and their resolution in practice, and
- Use this empirical evidence both to develop an original framework for the ethical applications of AI/robotics in social and health-care and to evaluate its implications for theory and practice.
Description

This project asks: what are the ethical challenges of using emergent new technologies in supporting elders in the community and the contingencies of their resolution? These technologies have surged over the past decade, as have their potential contribution to social/health-care. This has led to increasing ethical concerns (e.g. privacy, autonomy, liberty/safety, and the infantalisation/isolation of elders). Existing solutions are primarily at the technological interface (e.g. the incorporation of ‘ethical-algorithms’ into AI). Whilst some have pointed to the need for human mediation of ethical dilemmas, there has been little research about what this means. This will be the focus here.

This doctoral project will be carried out in conjunction with a major practice partner – Blackwood Homes (a leading Housing Association that provides supported housing for vulnerable adults and which is at the forefront of the application of emergent technologies to this cause). It will have significant synergy with the UKRI Healthy Ageing research programme stream on evolving supportive communities for vulnerable elderly people and of which both Professor Osborne and Blackwood Homes are a part of. They are leading the workstream exploring the design and co-creation of supportive communities for elderly people with an important emphasis on the role of emergent technologies on this process. This proposed doctoral project will take part within this stream and benefit both from the rich research opportunities provided by it and the potential for genuine applied research that has an impact on the health and social care of elderly people.

Eligibility:

We are specifically looking for applicants who will view their cutting-edge PhD research project in the context of the overall vision of the ACRC, who are keen to contribute to tackling a societal grand challenge and who can add unique value to – and derive great benefit from – training in a cohort comprising colleagues with a very diverse range of disciplines and backgrounds. We advise prospective candidates to engage in dialogue with the named project supervisor and/or the Director of the Academy prior to submitting an application.

Recruitment:

The current round of recruitment will end on 26 November. Thereafter, if places remain we will recruit on a rolling basis.

It is essential to read the How to Apply section of our website before you apply:

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