Helpdesk & FAQs

Questions? We have answers! If you need help, please add a comment below and we'll summarise the FAQs on this page.

If you have an urgent enquiry that's not answered here, please email m.dragone@hw.ac.uk.

I'm confused, what's all this about?

The Robotics & Care Mashup is a week long hybrid event centered around a hackathon designed to tackle real world challenges in the care sector using emerging Internet of Things (IoT), Artificial Intelligence (AI), Cloud and Robotic technology mashups.

It is being organised by the EPSRC Network <u>EMERGENCE</u> (Tackling Frailty: Facilitating the Emergence of Healthcare Robots from Labs into Service) and the <u>CARE Group</u>, and hosted by the National Robotarium and the Global Research Institute (GRI) for Health & Care Technologies at Heriot-Watt University.

It is not just for technical people. It is a social event aimed at bringing together healthcare experts, computer programmers, researchers, students and anyone interested in exploring the role of technology innovation in care and develop solutions that could help people living more indipendent lives.

Anyone will be able to follow the progress of the teams participating to the hackathon and give their feedback on the concepts being developed throughout the week.

The week will feature talks and seminars open to all attendees on healthcare topics, assistive technology and robotics.

Will it include CPD?

Yes. The mashup will provide Continuous Professional Development (CPD) opportunities to multidisciplinary health and social care professionals and anyone from institutional organisations and especially anyone involved in CPD and with a keen interest in technology innovation to address current and future service delivery challenges.

The week will feature sessions specifically designed to understand how health and social care professionals can benefit from using assistive robotics on their own terms. Empowering health and social care professionals through digital technologies has long been a goal in health and care policy. As governments invest in post-pandemic digital transformation, ensuring workers are empowered and not excluded by technology is more urgent than ever.

What can I learn at this event?

Attendees will explore the use of emerging technology including cloud, IoT and robotics equipped with machine learning and AI capabilities. These can be used to enable non-intrusive monitoring of behaviour and vital signs, detect patterns and trends in behaviour and individual health status,

identify problems, support self-management, decision-making and risk assessment, triage issues, facilitate communication and social connectedness, and provide social, cognitive and physical assistance when needed.

By engaging with our hackathon, attendees can get immersed in a practical product development experience in a cross disciplinary team. They will learn about emerging technologies but can also get their hands on actual robots in our robotics lab at the National Robotarium at Heriot-Watt University! Sessions will cover start-up skills as well as topics like ethics, accessibility and design thinking.

I cannot attend in person

People unable to travel or attend in person will be able to follow online sessions, and interact or even program our robots over the Internet! Anyone is free to join the community and watch the event talks, in person or online.

How much is it?

Everyone can register for free.

I am interested in taking part to the hackaton!

... but I don't have an idea for a project

This year challenge will be aligned with the frailty challenge defined by the <u>EMERGENCE</u> <u>Healthcare Technologies Network+</u>, a project funded by the Engineering Physical Science Research Council (EPSRC) led by the University of Nottingham in collaboration with Sheffield, Sheffield Hallam, Hertfordshire and Heriot-Watt Universities.

The EMERGENCE network aims to create a sustainable eco-system of researchers, businesses, end users, health and social care commissioners and practitioners, policy makers and regulatory bodies, in order to build the knowledge and capability needed to develop healthcare robots to support people living with frailty in the community.

The network has identified three priority themes:

- 1. Self-Management of Frailty Allowing people to self-manage their frailty by supporting behaviour change and self-managed rehabilitation activities.
- 2. Mitigation Mitigating the common manifestations of frailty through help with activities of daily living and wellbeing activities, and by addressing social isolation.
- 3. Better Support Allowing health and care professionals to better support people living with frailty by assessing and monitoring capabilities and mitigating the effects of frailty with personalised interventions.

If you want to be directly involved in developing an assistive robotic concept you don't need to have an idea to form a team - it's more important to find someone with complimentary skills, and you can work together to home in one of the above themes.

... I am not technical / I'don't have background in robotics, can I still contribute?

Yes! Most of our event participants will be non-technical - either health or care professionals, service users, designers, psychologists or entrepreneurs. However even if you don't fall into one of those categories please don't be discouraged.

Provided you have some time to give and are willing to get stuck in with a team, you'll find you have plenty to contribute

... how much time do I need to commit?

If you are interested in the talks and hands-on sessions, you'll need to make time to attend these, however we'll be recording all sessions so you can watch in your own time up until the last day of the event.

The hackathon will run over the whole week to provide as much flexibility as possible - how much time you dedicate is up to you, but we recommend at least a few hours a day. The main thing is that you're clear with your teammates and stay in communication with them.

... how can I find some teammates?

To help with this we will organise some virtual networking sessions in the runup to the event. In addition, we will host a showcase and networking event on the first day, the 16th of October, at the National Robotarium, where people will be able to interact with different examples of robotic technology, interact with each other, and with companies providing software and hardware resources for the hackaton.

Teams should comprise of a maximum of four participants, and we recommend complimentary skills - so no teams comprised of four developers! The ideal team will have someone with an understanding of a use case or the care sector in general, a technologist, a designer, and someone with a commercial background.

How do I register to the event?

Please sign up for a ticket and to receive further information by getting tickets on eventbrite.