YEAR OF ROBOTICS
2017
2017 was the Heriot-Watt Year of Robotics, a year packed full of events showcasing our work in Robotics and Artificial Intelligence (AI). Our incredibly committed staff and students have travelled the length and breadth of the country this year to bring people face-to-face with robots; demonstrating how they can revolutionise manufacturing, healthcare, offshore energy, construction, environmental monitoring and defence, with an approach sensitive to the social implications of the technology.

We have appeared at festivals, on television and radio and encouraged people to visit our labs to experience research in Robotics and AI, first-hand. A personal highlight for me was our success in the Amazon Alexa Prize, with our team ‘What’s Up Bot’, being one of only three in the world to reach the final competition; it’s particularly fitting to be recognised in a global competition at the end of, what has been, a hugely successful 12 months.

Professor Oliver Lemon
Director, Interaction Lab.
In 2017 our Year of Robotics initiative has reached more than 1,800 school children, 13,000 members of the public and 150 industry partners; in face to face sessions, demonstrations and through our lead role in the European Robotics Forum.

Our internationally renowned experts are designing some of the world’s most advanced robots with outstanding capabilities in Robotics and Artificial Intelligence (RAI), Robotics and Autonomous Systems (RAS), and Human-Robot Interaction (HRI). This has led to major successes, this year alone, including our Interaction Lab team reaching the final three in the $2.5M Amazon Alexa Prize.

£14.6M funding has been awarded by the Engineering and Physical Sciences Research Council (EPSRC) for a £36M Offshore Robotics for Certification of Assets Hub or ‘ORCA Hub’. Professor David Lane of Heriot-Watt University is leading the consortium including the University of Edinburgh, Imperial College London, the University of Oxford and the University of Liverpool, together with 31 industry partners, to develop robotics technologies for use in extreme and hazardous environments.

Heriot-Watt University and the University of Edinburgh jointly run the Edinburgh Centre for Robotics (ECR), a remarkable £100M investment supported by more than 40 industrial partners, with state-of-the-art facilities for global researchers. This is now set to become the UK’s NATIONAL ROBOTARIUM, as part of the Edinburgh and South East Scotland City Region Deal.

Robotics has been identified by the Scottish and UK Governments as a key growth area and our significant robotics research concentration is already contributing towards the drive to revolutionise manufacturing, healthcare, offshore energy, construction, environmental monitoring and defence.
Inspiring, interacting and igniting a spark!

We kicked off the year with our mascot competition, receiving over 1100 entries from 50 primary schools. Ten-year-old Katy Ashworth designed ‘Watt Bot’, a blue humanoid-robot complete with switches for arms, wind-screen wipers for eyebrows and the Heriot-Watt logo on its chest.

Springtime brought secondary schools, Brownies and Girl Guides, across Edinburgh and the Lothians, to a series of special events hosted by students and academics, aimed at inspiring girls to code and instruct robots.

Robots were the highlight of festivals across the UK, from Edinburgh International Science Festival, to CarFest for BBC Children in Need, Pint of Science, Midlothian Science Festival at IKEA, Doors Open Day, European Researchers Night, Innovation Robotics at the EICC and the Edinburgh Fringe.
Our robotics experts and research outcomes regularly appeared on television, radio, in newspapers and online across the UK and internationally, reaching a potential audience of over 25 million people.

We connected with audiences of all ages and backgrounds including MSPs, MPs, peers and key funders at two well-attended parliamentary receptions at Holyrood and the House of Commons.

Our social robot Pepper was transformed into a public speaker and television presenter with appearances in CBBC’s Blue Peter, BBC2’s Six Robots and Us and STV’s Live at Five.

And did we mention, we were the only UK university to make the final three, in the world, in the global Amazon Alexa Prize.
Impact and insights

“It was an worthwhile and excellent visit, with the pupils kept engaged all afternoon and the feedback from them was excellent.”

Patrick Robertson
Kirkhill Primary School

“I loved the robots.”

5 year old
Doors Open Day

81 academic staff
1800 school pupils
44 students
150+ industry engagements
42 support staff
27 public events
100+ schools
40 MSPs, MPs and peers
13,000 people
29 visits and workshops
A massive thank you for allowing our pupils to take part in the Robotics workshop - our pupils have been talking enthusiastically about the day and are even trying to persuade the Head Teacher to buy some robotic equipment for the school.

Jade Telfer
St Joseph’s Primary School, Linlithgow

Great day – inspiring and interactive fun, thank you!
Participant at IKEA workshop
Midlothian Science Festival

Robotics and artificial intelligence will be part of everyone’s future, and it’s really important that we engage and inspire people with our research. It’s been great to see colleagues from across the university coming together at so many different events for a wide range of audiences. I think we’ve really demonstrated that Robotics and AI is truly interdisciplinary, and for everyone.

Dr Laura Wicks
Public Engagement Lead

A prefect introduction to Heriot-Watt – thought provoking and fun!

Audience member
Doors Open Day