



Job title	Research Associate/Fellow	Job family and level	Research and Teaching Level 4
School/ Department	Computer Science/Engineering	Location	Jubilee Campus

Purpose of role

The Smart Products Beacon (<https://www.nottingham.ac.uk/research/beacons-of-excellence/smart-products/index.aspx>) is exploring how leading edge technologies emerging from Computer Science and Engineering can fundamentally disrupt the nature of products and how they are made. We tackle how the combination of physical and digital technologies, from robotically-enabled manufacturing and additive manufacturing to artificial intelligence and mixed reality, can make possible smarter products that blend goods, services and experiences into new forms. We also explore how these same technologies can disrupt how these products are made. Throughout this process we work to ensure that these smarter products are produced in responsible ways that embody the fair and transparent use of personal data, operate safely, and respect human values.

The purpose of this role will be to support the Smart Products Beacon in establishing its research agenda by contributing to the development, deployment and/or study of projects. We are looking to recruit a team of researchers with the following skills:

- Software platform development
- Artificial intelligence
- Security
- Development and Integration of sensors and interfaces
- Advanced manufacturing techniques
- User studies

The post holder will be expected to:

- Create and lead an independent research programme
- Work as part of a multi-disciplinary team to enhance impact
- Have the flexibility to work on several ongoing projects while developing their own work
- Contribute to and lead high quality publications and proposals

The role holder will have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	To plan and conduct research using recognised approaches, methodologies and techniques within the research area.	50%
2	Analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area.	10%
3	Contribute to writing up research findings for publication.	15%

4	Assist or lead with the preparations of proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.	5%
5	Develop public and community awareness to bring our research to a wider audience.	5%
6	Co-ordinate the operational aspects required for projects being worked on.	5%
7	Assist in the supervision of undergraduate and postgraduate students.	5%
8	Plan and manage own research activity and resolve problems, if required, in meeting research objectives and deadlines in collaboration with others.	5%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Excellent research skills to realise the systems and studies to be required. ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Developing research skills, with the ability to creatively apply relevant research approaches, models, techniques and methods ▪ Analytical ability to facilitate conceptual thinking, innovation and creativity. ▪ Ability to build relationships and collaborate with others, internally and externally. 	<ul style="list-style-type: none"> ▪ Ability to assess and organise resource requirements and deploy effectively. ▪ Ability to foster a research culture and commitment to learn in others. ▪ High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Evidence of sufficient breadth or depth of research methodologies and techniques to become a leader in their research area. 	<ul style="list-style-type: none"> ▪ Experience of working within diverse teams. ▪ Practical experience of applying their specialist skill approaches and techniques.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD Degree, or equivalent in relevant subject area, or studying towards a PhD with expected completion before or near start date. 	<ul style="list-style-type: none"> ▪ Master's Degree, or equivalent in relevant subject area.



The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
- Taking ownership** Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
- Forward thinking** Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
- Professional pride** Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
- Always inclusive** Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others



