

## PHD STUDENTSHIP ON “THE DESIGN OF EVERYDAY THINGS” INFORMATION FOR CANDIDATES

This PhD will investigate the intersection of established industrial User eXperience (UX) and design professions, with the increasing availability of consumer ‘Internet of Things’ (IoT) technologies for the workplace, the home, and beyond. It will examine the connections between academic research and the work of practitioners in designing products and services for the IoT. One of the aims of the PhD would be to conduct empirical studies of design practice. The PhD offers the opportunity for the student to be practically involved in a series of placements within IoT-related industry and UX & design professionals, ‘bridging the gap’ between UX, the nascent IoT industry, and academic research.

In recent years there has been an increased interest in the design and manufacture of IoT technologies. Yet many of the key challenges and opportunities that surround the IoT have been explored in some way within the academic fields of Ubiquitous and Pervasive Computing (‘ubicmp’) research for the last 20 years. It is only very recently that IoT devices and services have become viable commercial products. Devices such as the Nest thermostat or the Amazon Echo point to the central role of design in a future landscape of smart interconnected Things. What is unclear, however, is how the upcoming interests among UX & design professionals for working on IoT products and services may potentially both draw upon, and enrich this research.

This PhD examines the socio-technical aspects of design work; such studies of ‘the social’ would offer a key route to locating how design practices feature in the development of IoT products and services and thus working on ways that insights from ubicmp research may support this, as well as delivering novel understandings of professional design practices for the IoT back to research. Practically this will mean ‘embedding’ with industrial partners for periods of time (e.g., via internships / placements) to investigate design work ‘from within’. This could involve taking an ethnographic, participant-observation approach informed by ethnomethodology and conversation analysis.

### **Desirable backgrounds and skills**

- Applicant background: Design disciplines; Social sciences; Computer Science
- Conversant with the principles of User-Centred Design
- A background in industry UX work beneficial but not required
- Strong interest in / willingness to study the social aspects of design work

### **Benefits of the programme**

- The PhD scholarship includes a stipend of £14,057 per year and will cover full University fees.
- Based within the Mixed Reality Lab (<https://www.nottingham.ac.uk/research/groups/mixedrealitylab/index.aspx>) in the School of Computer Science at the University of Nottingham. MRL offers a collaborative inter- and multi-disciplinary working environment with studio space and a broad network of national and international research and industry contacts.
- Placements could take place with a range of potential partners, including: BBC, Wireless Things / 365agile
- Studentship could link with current EPSRC-funded research projects, including the UbiDesign project (see <http://gow.epsrc.ac.uk/NGBOVViewGrant.aspx?GrantRef=EP/N005945/1>) and the autonomous IoT project (see <http://gow.epsrc.ac.uk/NGBOVViewGrant.aspx?GrantRef=EP/N014243/1>).

Please note that due to the nature of funding, applications are welcome from United Kingdom and European Union students only.

Informal enquiries may be addressed to Dr Stuart Reeves and / or Dr Joel Fischer, School of Computer Science, University of Nottingham, email: [stuart.reeves@nottingham.ac.uk](mailto:stuart.reeves@nottingham.ac.uk) / [joel.fischer@nottingham.ac.uk](mailto:joel.fischer@nottingham.ac.uk)