

## Augmented Multisensory Interaction and Inclusive Education

*Type of award* PhD Research Studentship

*Department* Computer Science

*Scholarship Details* Scholarship covers full UK/EU (EU applicants who have been resident in the UK for 3 years prior to application) PhD tuition fees and a tax-free stipend at the current RCUK rate (£14,296 in 2016/17, £14,553 in 2017/18). EU nationals resident in the EU may also apply but will qualify only for PhD tuition fees

*Duration* 3.5 years

*Eligibility* Home/EU applicants only

*Start Date* September 2017

### PhD Topic Background/Description

The successful candidate will work on the EPSRC project “*Crossmodal Interactive Tools for Inclusive Learning*” (EP/N00616X/2), which aims at investigating novel multisensory learning and teaching technologies that support inclusive education for visually-impaired and sighted children in mainstream schools. The project uses an iterative user-centered approach, combining participatory design activities with empirical research into augmented reality, multimodal and crossmodal interaction to find out how different senses can be effectively integrated with visual capabilities to support inclusive collaborative learning. We are engaged with local schools to design, implement and research augmented multisensory tools for teaching and learning purposes, focusing on accommodating curriculum requirements and social processes surrounding collaborative learning.

With strong programming and development skills, the successful candidate will have an appreciation for user-centered design approaches and work well independently as well as part of a team. Experience in multisensory and collaborative systems development will be valued. They will work with partner schools to conduct research that ranges from accessible participatory design to software and hardware development, and experimental user studies and evaluation. There will be freedom and flexibility in shaping the research project within these broad objectives.

### Further Particulars

#### Candidate Requirements

A background in Computer Science and/or HCI. Academic excellence i.e. 2:1 (or equivalent GPA from non-UK universities [preference for 1st class honours]); or a Masters (preference for Merit or above). Standard English language requirement: Profile E. Candidates with strong practical maker skills will be preferred. Excellent programming skills and a good understanding of computer architecture are essential.

**Basic skills and knowledge required:**

- Solid skills in software and hardware development
- Expertise in physical and digital prototyping, sensors, making, tinkering, etc.
- Knowledge of HCI and participatory design
- Interest in multisensory interaction and accessibility

**Scholarship Details**

Research Council £14,296 p.a. in 2016/17 (£14,553 p.a. in 2017/18).

**Informal enquiries**

Please email Dr Oussama Metatla ([o.metatla@bristol.ac.uk](mailto:o.metatla@bristol.ac.uk))

For general enquiries, please email [ggen-pgrs@bristol.ac.uk](mailto:ggen-pgrs@bristol.ac.uk)

**Application Details**

Applicants should first send:

- Their CV (max 4 pages)
- List of publications (if available), e.g. Master's thesis, any scientific publications, and other relevant work with links (if available)
- Projects portfolio (if available)

to Dr. Metatla ([o.metatla@bristol.ac.uk](mailto:o.metatla@bristol.ac.uk)) before they are considered for this studentship. If they meet the minimum criteria, they will be asked to submit a full application with academic references online at: <http://www.bristol.ac.uk/study/postgraduate/apply/>.

Please ensure that in the Funding section you tick "I would like to be considered for a funding award from the Computer Science Department" and specify the title of the scholarship in the "other" box below with the name of the supervisor.