Title: PhD in Computer Vision and Machine Learning – EPSRC Project LOCATE

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). EU nationals resident in the EU may also apply and though they will qualify only for PhD tuition fees, additional funding will be matched from an alternative source
Duration	3.5 years
Eligibility	Home/EU applicants only
Deadline	Open until filled

PhD Topic Background/Description

Applications are invited for a fully-funded PhD studentship in Computer Vision and Machine Learning. The successful candidate will be working on a project focused on zero-shot activity recognition. During the PhD, the student will learn and use computer vision methods such as tracking, object detection and localisation, action and higher-level activity recognition. Machine learning methods related to transfer learning and Long Short-Term Memory (LSTM) neural networks will be used as well as conventional convolutional neural networks (CNN). The student will also learn how to analyse and work with images captured using RGB-D sensors (e.g. Kinect V2).

Problem Statement: A single visual and depth sensor, deployed in e.g. a kitchen, will observe a person performing their daily chores, such as washing the dishes, preparing a meal or cleaning. By learning these activities from **one or more different kitchens, where people perform their chores differently**, this project will target **automatically identifying the expected activities** in the new kitchen. As more (unlabelled) data is gathered, the solution aims to perform with accuracy comparable to that trained on labelled data in the new kitchen itself.

Applicant will work in a vibrant computer vision lab, with more than 15 PhD students and 5 postdoctoral researchers working in closely related topics. For an insight into the supervisor's current and previous works, refer to: http://www.cs.bris.ac.uk/~damen

Further Particulars

Candidate Requirements

A minimum 2.1 honours degree or equivalent in Computer Science, Mathematics or other relevant subjects. Standard English language requirement: Profile E

Basic skills and knowledge required:
Solid mathematical ability and excellent programming skills.

Basic knowledge of Machine Learning.
Basic knowledge of Computer Vision would be very useful.
Interest in research and loads of patience.

Informal enquiries

For informal enquiries, contact Dr. Dima Damen: damen@cs.bris.ac.uk

For general enquiries, please email gsen-pgrs@bristol.ac.uk

Application Details

Applicants should first send their CV (max 4 pages) to Dr. Damen (email above) 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.