# Call for Participation

## Mini-Workshop on `Low power and adaptive computer vision for scene understanding'

**Place & Date:** Mercure Sheffield St Paul's Hotel & SPA, 119 Norfolk St, Sheffield S1 2JE, UK || January 28, 2017.

Active participations are solicited for attendance at the mini-workshop on 'Low power and adaptive computer vision for scene understanding'. This mini-workshop is jointly funded by ViiHM (Visual Image Interpretation in Humans and Machines), an EPSRC network for Biological and Computer Vision (http://www.viihm.org.uk/); and the Department of Computing, Sheffield Hallam University. The proposed workshop differs from traditional presentation style workshop structure and aims to engage participants by a number of brainstorming sessions and discussions in a non-academic setting. The possible outcomes of the proposed workshop include a) to outline challenges and research directions, b) multi-discipline review paper (white paper), c) to form interdisciplinary collaboration and future proposal submission and d) to engage researchers from diverse background to work towards the workshop theme.

**Guest Speakers:**
Prof Wayne Luk, Imperial College (High performance custom computing)
Prof Jenny Reads, Newcastle University (Vision Science)

**Cost:** Free to attend.
Limited funding is available to cover travel and accommodation (email to deepayan.bhowmik@shu.ac.uk).
Priority will be given to participants travelling from far.

The number of delegates is restricted to maximum of 30 attendees. The workshop is suitable for (not limited to) academics, research associates and PhD students in the field of image processing, vision science, real-time computing, psychology and robotics.

**Registration:**
To register please use the link: https://viihm2017.eventbrite.com.

**Draft agenda:**

| | |
|---|---|
| 09:00 – 09:45 | Welcome & Morning tea / coffee |
| 09:45 – 10:45 | **Key note Lecture I**: Prof Wayne Luk, Imperial College **(Title: TBC)** |
| 10:45 – 11:00 | **Tea / Coffee break** |
| 11:00 – 11:45 | **Brainstorming Session I:** Scene understanding, its applications and computer vision based approaches |
| 11:45 – 12:30 | **Brainstorming Session II:** Power efficient accelerated image processing hardware design and importance of sparse and approximate computing. |
| 12:30 – 13:15 | Lunch |
| 13:15 – 14:15 | **Key note Lecture II**: Prof Jenny Reads, Newcastle University **(Title: TBC)** |
| 14:15 – 15:00 | **Brainstorming Session III:** Mimicking biological vision in designing efficient vision system, e.g. multiple low-resolution visual sensors ('bug vision') |
| 15:00 – 15:15 | **Tea / Coffee Break** |
| 15:15 – 16:00 | **Brainstorming Session IV:** The application of task oriented scene understanding in robotic vision |
| 16:00 – 16:30 | Future directions:<br>a) Review / Summary paper<br>Collaboration and opportunities for research proposal submission |
| 16:30 – 16:45 | Closing |