





## **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 (<a href="http://www.viihm.org.uk/">http://www.viihm.org.uk/</a>); 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 <a href="mailto:deepayan.bhowmik@shu.ac.uk">deepayan.bhowmik@shu.ac.uk</a>).

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: <a href="https://viihm2017.eventbrite.com">https://viihm2017.eventbrite.com</a>.

## Draft agenda:

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09:00 - 09:45	Welcome & Morning tea / coffee
09:45 - 10:45	Key note Lecture I: Prof Wayne Luk, Imperial College. Title: Towards smart sensing based
	on field-programmable technology
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 Read, Newcastle University. Title: What makes insect vision
	special?
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:
	a) Review / Summary paper
	Collaboration and opportunities for research proposal submission
16:30 – 16:45	Closing