

## 1.1 Dr Shaogang Gong

## Queen Mary and Westfield College, London

<b>Higher Education Institute :</b>		Queen Mary and Westfield College, London					
<b>Faculty/School/Group :</b>		Machine Vision Research Group, Department of Computer Science					
<b>Address:</b> Dept of Computer Science, Queen Mary and Westfield College, Mile End Road, London E1 4NS							
<b>Contact:</b> Dr Shaogang Gong				<b>Tel:</b> 0171 975 5249			
<b>Email:</b> sgg@dcs.qmw.ac.uk							
<b>Keywords</b> <i>select as appropriate</i>	<b>Security</b>	<b>X</b>	<b>Fraud Control</b>	<b>x</b>	<b>Privacy</b>	<b>x</b>	
<i>(Add keywords from list)</i>	Face processing			Video processing			
Bayesian learning	Neural networks			Data fusion			
Predictive algorithms	Access control			Behavioural studies			
<b>Research Overview:</b>							
Developing computational models for Human Recognition including human faces, body movement, gestures and behaviour in dynamic scenes. Over the last 10 years, we have been focused on building viable and robust real-time artificial vision systems for understanding dynamic events that are closely associated with human identities and activities in image sequences captured by CCTV cameras.							
<b>Contact:</b> Dr Shaogang Gong				<b>Tel:</b> 0171 975 5249			
<b>Email:</b> sgg@dcs.qmw.ac.uk							
<b>Research Project overviews:</b>							
<p><b>Researcher(s):</b> Jamie sherrah, Jon Ong, Yongmin Li  <b>email:</b> jamie@dcs.qmw.ac.uk, <a href="mailto:ongej@dcs.qmw.ac.uk">ongej@dcs.qmw.ac.uk</a>, yongmin@dcs.qmw.ac.uk  <b>details:</b> ISCANIT (Recognising Intention in Real-Time for Visually Mediated Interaction): This project undertakes research supporting Visually Mediated Interaction (VMI) and is developing generic view-based head and body behavioural models. These models are used to recognise user intentions for active camera-view selection and switching. A prototype system will be built to perform real-time tracking of multiple people and their people and their behaviours simultaneously within typical indoor office or home environments.</p>							
<p><b>Researcher(s):</b> Dennis Parkinson, Paul Verity, Jon Ong  <b>email:</b> dennisp@dcs.qmw.ac.uk, paulv@dcs.qmw.ac.uk, ongej@dcs.qmw.ac.uk  <b>details:</b> AIMS (Advanced Incident Monitoring Systems): This project is focused on developing real-time systems for detecting, tracking and recognising moving faces in natural. Compared to the more typical scenarios of face recognition in which a single or a few isolated face images of near-frontal view are the subjects of interest, such a system requires not only correct recognition of continuously changing face images, but also robust detection and tracking of faces under poor lighting conditions and of low resolution. Significantly, it must cope with changes in face images caused by large variations in 3D viewpoint without utilising explicit 3D models if real-time</p>							

performance with moderate hardware is required.

**Researcher(s):** Yongmin Li, Jeffrey Ng, Jack Chang

**email:** [yongmin@dcs.qmw.ac.uk](mailto:yongmin@dcs.qmw.ac.uk), [jeffng@dcs.qmw.ac.uk](mailto:jeffng@dcs.qmw.ac.uk), [cth@dcs.qmw.ac.uk](mailto:cth@dcs.qmw.ac.uk)

**details:** Visual Learning and Data Fusion: Support Vector Machines, Hidden Markov Models and Bayesian Belief Networks have been exploited for developing computationally efficient algorithms for visual learning and data fusion between multiple views.

**Source HEI**