

## Modelling Saliency in Visual Quality Assessment

**SPEAKER** Dr Hantao LIU

Lecturer (Assistant Professor)  
School of Computer Science and  
Informatics  
Cardiff University  
United Kingdom

**DATE** 12 July 2017 (Wednesday)

**TIME** 2:30 pm - 3:30 pm

**VENUE** G7315, 7th Floor, Green Zone  
Yeung Kin Man Academic Building  
City University of Hong Kong  
83 Tat Chee Avenue  
Kowloon Tong

### ABSTRACT

Reliably predicting visual media quality as perceived by humans remains challenging and is of high practical relevance. A significant research trend is to investigate visual saliency and its implications for visual quality assessment. Fundamental problems regarding how to acquire reliable eye-tracking data and how saliency should be incorporated in computational quality assessment models are largely unsolved. This talk will focus on methodologies for reliably collecting eye-tracking data, assessment of the capabilities of saliency in improving the performance of quality assessment models, as well as the optimized use of saliency in visual quality assessment systems.

### BIOGRAPHY

Dr Hantao Liu is a Lecturer (Assistant Professor) with the School of Computer Science and Informatics, Cardiff University, United Kingdom. He received the Ph.D. degree from the Delft University of Technology, Delft, The Netherlands, in 2011. Since 2006, he has been working closely with the industry to develop next generation image and video technologies. He led a project funded by Philips Research Laboratories that developed novel algorithms for visual media quality assessment; and a project funded by Philips Healthcare that addressed a number of issues related to medical image perception. He is a founder member of the Delft Image Quality Lab.

His research interests include visual media quality assessment, visual attention modelling and applications, visual scene understanding, medical image perception and human-machine interaction. He served as a Management Committee member (UK representative) of COST Action IC1003 Qualinet: European Network on Quality of Experience in Multimedia Systems and Services, and Area Chair of IEEE International Conference on Multimedia and Expo 2015, 2016. He is now serving as the Chair of IEEE MMTC Interest Group on Quality of Experience for Multimedia Communications. He is serving as an Associate Editor for the following international journals: IEEE Transactions on Multimedia; IEEE Transactions on Human-Machine Systems; Signal Processing: Image Communication; Signal, Image and Video Processing; and Neurocomputing.

**All are welcome!**



In case of questions, please contact Dr Shiqi WANG at Tel: 3442 7341, E-mail: [shiqiwan@cityu.edu.hk](mailto:shiqiwan@cityu.edu.hk), or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/news/seminars/seminars.html>.