QoMEX 2018, https://www.qomex2018.org/

Special Session on Quality Assessment for Medical Imaging Applications

Invitation for contributions

Motivation

Delivering optimal image quality to clinical professionals remains a fundamental challenge for medical imaging technologies, products and services. Understanding and modelling medical image perception is the key. The research comprises a broad spectrum of aspects related to technical system characteristics, human perception and behaviour, user needs and responses, and usability of the delivered content. Being able to control and improve medical image quality requires a detailed understanding of medical image perception.

Objectives

The goal of this special session is therefore to bring together leading researchers from different disciplines, including medicine (radiology but also other specialties), psychology, neuroscience, computer science, and human-computer interaction to exchange ideas, concepts and approaches, to facilitate discussions and foster new insights into understanding of medical image perception, as well as to promote collaboration and multidisciplinary approaches to medical image quality modelling. We intend to cover timely and challenging subjects, such as (human and computer) detection and discrimination of abnormalities, computer-based perception, impact of display and ergonomic factors on diagnostic performance, effect of image processing on perception and performance, and image quality assessment methodologies.

Topics of interest

We are seeking papers that include, but are not limited to, the following topics:

- Factors of medical image interpretation
- Computer-based medical image perception
- Subjective and objective experiments for medical image quality assessment
- Relationship between perceptual and task-based medical image quality

Research involving medical imaging modalities and clinical tasks beyond radiology are especially encouraged to be submitted to provide insights into the diversity of image quality requirements determined by different use cases and clinical tasks.

Submission Procedure

If you wish to take part in the Special Session on Quality Assessment for Medical Imaging Applications, please send email to LevequeL@cardiff.ac.uk before Friday 10th November including:

- **The title of your article;**
- **The authors' names and affiliations;**
- **The abstract (max 500 words).**

Deadline full paper submission (maximum of 6 pages): **January 22, 2018**

Submitted papers will undergo a double-blind review process. All presented papers will be published in IEEExplore and included in the Conference Proceedings.

More information about the QoMEX 2018 Call For Papers is available at https://www.qomex2018.org/call-for-papers/

Organizing Committee

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*The organizers are members of the **QUALINET Task Force 3 "QoE in Medical Imaging and Healthcare"** focusing on methodological and interpretative differences between the general (non-task-based) and medical (task-based) image quality assessment, including both subjective and objective strategies.*