

Workshop title: Future Directions in Image Quality

Chairs: Marius Pedersen and Seyed Ali Amirshahi

During the last few decades' image quality assessment has been an important and attractive field of research. While current state-of-the-art image quality metrics show a high correlation with subjective scores many challenges still exist. This workshop aims to bring experts from both academia and industry to introduce challenges and possible directions needed to be taken in subjective and objective image quality assessment. We will then have a discussion and Q&A session to address possible solutions for these new challenges.

Speakers and timetable for this workshop:

- 15:30-15:35 **Introduction** - Professor Marius Pedersen, (Norwegian University of Science and Technology)
- 15:35-15:50 **Image enhancement and issues on quality assessment** - Professor Azeddine Beghdadi (Galilee Institute, University Paris 13, Sorbonne Paris Cité)
- 15:50-16:05 **Recent trends in machine learning for image quality** - Dr Aladine Chetouani (PRISME - Axe Image & Vision, Université d'Orléans - Polytech'Orléans)
- 16:05-16:20 **Image quality in biometrics** - Dr. Christophe Charrier (Université de Caen Normandie)
- 16:20-16:35 **Quality assessment of XR applications** - Dr. Chaker Larabi (XLIM, University of Poitiers)
- 16:35-16:50 **Color image quality assessment in smartphones** - Dr. Claudio Greco (DxOMark Image Labs, France)
- 1650-1700 Break
- 17:00-17:10 **Future of subjective evaluation and crowdsourcing** - Dr. Seyed Ali Amirshahi (Norwegian University of Science and Technology)
- 17:10-17:25 **Challenges in medical image quality assessment** - Dr. Razvan Lordache (GE Healthcare France):

- 17:25-17:40 **The future of video quality metrics** - Professor Frédéric Dufaux (L2S, University Paris-Sud)
- 17:40-18:00 **Open discussion and Q&A**

Marius Pedersen is professor at the Norwegian University of Science and Technology. His work is centered on image quality assessment; he has more than 60 publications in this field. He received his PhD in color imaging (2011) from the University of Oslo. He is currently the head of the computer science group in Gjøvik in the department of computer science, as well as the head of the Norwegian Colour and Visual Computing Laboratory, both at NTNU.

Seyed Ali Amirshahi is a Marie Curie post-doctoral Fellow in the Norwegian Colour and Visual Computing Laboratory at the Norwegian University of Science and Technology (NTNU). His research is mainly focused on different aspects of image and video quality assessment and computational aesthetics. He received his PhD from the Friedrich Schiller University of Jena in Germany (2015). Prior to joining NTNU, he was a post-doctoral Fellow at the International Computer Science Institute in Berkeley, California.