

Programme of the visit

WT2.13: Tampere Univeristy of Technology

Task leader name:

Visiting person name: Michał Joachimiak

Period: 04.09.2015 - 04.03.2016

Name of the person at the partner institution with whom you agreed the programme Urszula Markowska-Kaczmar

Name of the person who agreed to present you procedures referring to patenting and cooperation between SME and university Michał Joachimiak

Scientific activities agreed with the hosting partner:

1. Seminar entitled “Visual saliency estimation for 3D video encoding”. The aim of the seminar is to describe principles of perceptual video coding, the details of the Human Visual System properties that give possibility for perceptual and foveated 3D video coding, namely binocular suppression, binocular fusion, retinal eccentricity. The algorithms that realize 3D video encoding basing on these principles will also be introduced.



2. Establish the measurement stand and procedures at the Human-Computer Interaction laboratory that would serve for subjective 3D video quality evaluations and objective evaluation based on the gaze tracking data. Propose measurement evaluation and analysis methodologies.
3. Preparation of the journal publication with tentative title “Fast Visual Attention Estimation for Foveated 3D Video Encoding”.
4. Preparation of the conference publication with tentative title „Evaluation of 3D Video Depth Perception via Binocular and Motion Parallax”.
5. Increase the amount of research work at the Faculty of Computer Science and Management, Wrocław University of Technology, devoted to image processing. In the scope of this task the visitor will seek for possibilities of cooperation between the host Faculty and other Technical Universities in Poland. In addition, the visitor will encourage students to work on the topics related to 3D video processing, medical image processing, computer vision and others related to image processing.