DTU Fotonik
Department of Photonics Engineering

MSc Thesis Project

Coding and processing of HDR images and video

Introduction: HDR image and video technology is rapidly developing. The goal of the project is to obtain high quality for displaying coded HDR material on HDR monitors. This involves both an accurate description of the HDR material or capture process, efficient coding techniques and accurate evaluation of the images reproduced on the HDR display.

Contents: In the project, the student(s) will work coding of high-qualtity HDR material e.g. using the novel JPEG-XT techniques, processing for coding artifact reduction and objective or subjective evaluation of the visual quality on HDR displays. Ideally the whole signal chain from capture to display will be modelled. The visual quality shall be evaluated both before and after processing.

Prerequisites: Knowledge of video coding and processing as e.g. in 34241 Digital Video Technology or 34250 Advanced Image and Video Coding or 34240 Data Compression.

Additional information:

- Contact teacher.

Practical details: The project is intended for 1 or 2 students with 30 ECTS-points per student.

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