## **Master Thesis**

## Influence of Color Calculation on the QoE

The Sensory Experience Lab (SELab) works on the development of the future home cinema. One aspect is the enhancement of video sequences by additional effects such as wind, vibration, or light. We are looking for students who want to write a master thesis in this area. The main goal of the thesis is the implementation and evaluation of different color algorithms and color spaces for presented light effects.

## Goal:

- Implementation and evaluation of various color algorithms (e.g., dominant color, different color spaces) in existing tools.
  - o Considering GPU (e.g., CUDA and OpenCL) and CPU implementations
  - **Optional:** Development of one or more user studies.
- **Optional:** Performing the evaluation(s) and analyzing the results.

## **Requirements:**

- Student of a technical study
- C/C++ skills
- Optional: Knowledge in CUDA and/or OpenCL
- Optional: Knowledge in preparing and conducting user studies
- **Optional:** Knowledge in Web programming and HTML/HTML5

**Start:** with immediate effect

We are looking forward to your applications which should be sent to selab@itec.aau.at

