Seminar - Hot Topics in Computer Vision

Visualization of the DFC18 dataset (© IEEE GRSS IADF)

Computer Vision is a very active research field, having both theoretical and practical importance. The goal of computer vision is to enable machines to process, analyze, and interpret visual data acquired with cameras and other sensors.

This year's seminar mainly focuses on **machine learning in the vision domain** – in particular (while not exclusively limited to) on **deep learning** and **ensemble learning** in the context of **remote sensing**. What are the special characteristics of image data? What does it mean to understand an image? Which priors are especially suited? To answer these questions we will have a look at papers in the area published in **leading conferences and journals**. Participants will gain an overview of the state-of-the-art methods in the field, learn to read and understand research papers in this area, as well as improve their presentation and analytical skills.

Every participant will give a **presentation** on one topic, solve a **small programming task**, prepare a **written report**, and review the work of other students. Additionally, you are required to attend the presentations of other students and participate in the subsequent discussions.

The seminar will be offered in **English**. Prior knowledge in computer vision or machine learning is not mandatory, but highly recommended. **Basic programming skills (C++)** and a good background in mathematics are recommended as well. There is a maximum number of participants: If more students are interested in the course, places are assigned randomly.

The introductory meeting will take place

on April 16, 2021
at 10am c.t.
virtually via Zoom.

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Information: available on ISIS: HTCV – SE [SoSe21]