Friedrich-Alexander-Universität
Department Artificial Intelligence
in Biomedical Engineering | AIBE

TOPIC:

Emotion Recognition from Video Data using Facial Action Units, Head Pose, and Eye Gaze

Objective:

Develop a system that can automatically recognize and classify emotions from video data by analyzing facial action units, head pose, and eye gaze.

Description:

This project involves designing and implementing a system that can automatically recognize emotions from video data by analyzing the facial action units, head pose, and eye gaze of the person in the video. The system will be trained on a dataset of annotated video clips, where each clip has been labeled with the corresponding emotion. Once trained, the system will be able to process new video data and output the predicted emotion for each frame.

The project will require a combination of computer vision and machine learning techniques to extract relevant features from the video data and train a classification model. The system will need to be able to accurately identify and track the facial action units, head pose, and eye gaze of the person in the video, and use this information to classify the emotion.

Requirements:

- Experience in machine learning, and preferably computer vision
- Strong programming skills, especially in Python
- Ability to work independently and as part of a team, with good communication and organizational skills.

In case you are interested, please send your CV, your transcript of records and 2-3 sentences about your motivation to:

Misha Sadeghi
Machine Learning and Data Analytics Lab
misha.sadeghi@fau.de