

Using the OpenCV library to build an emotion recognition program

Bui Manh Tuan

Abstract: In the context of the increasing demand for understanding and managing human emotions, this topic focuses on applying the OpenCV library to develop an emotion recognition system. The main objective is to build a program capable of analyzing video images from an input camera, using machine learning algorithms to identify the user's emotional state. The research methodology includes studying the theory of emotions and machine learning, followed by experimental implementation on real video data. The topic is expected to bring significant value through its potential to support mental healthcare and risk management in work environments.

Keywords: OpenCV, emotion recognition, machine learning, camera input, image analysis