## Recognition of Human Emotions by Biometric Parameters

Javadov, Nijat

Rysmagambetov, Yernur

Objective: The practical application and implementation of methods and algorithms that recognize emotions by biometric parameters of human's face. The practical application and relevance: The "success rate" program is very affordable because it does not require special equipment, works in real time. Applicable to the recognition of emotional indicator of several persons simultaneously. This program can be used to obtain data on the emotional state of the person. On the basis of this information we can conclude about the human's general emotional state (psychotherapy), man's relation to the presented product (marketing) of the general success of the presented ideas or conducted lessons (business and education). It is expected that the use of this program will significantly improve the quality of research conducted in the fields of education, advertising, marketing, psychology, and the production of goods and services. Using the program will increase the efficiency of interaction between producers and consumers. Due to the capabilities of machine learning algorithms program has prospects in the field of robotics, which can be used to establish or improve intelligent machines, such as robot-seller. Stages of the study: Recognition of emotions by the image occurs in two stages. At the first stage, is the detection of persons, that is the definition of the people's face positions in the image. For this we use the Violla-Jone's method implementation, which use cascade classifiers for this task. Also at this stage will be the identification of key points on a human face, for later use. Next is a more complex stage which will occur a so-called face recognition.

**Awards Won:** 

Fourth Award of \$500