

**PROJECT TITLE:** Facial Emotion Recognition with Deep Learning

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**ABSTRACT:** In this study, we aim to find the emotional expression equivalents of human faces in an image. Our work should identify a human face that has the appropriate angle and brightness values in an image and report his/her current emotional state by making various analyzes. For example, we should see the 'happy' response of a smiling person's image.

**PROJECT SCHEDULE:** We planned the project schedule as follows:

1. Searching the project subject, 16.11.2020 - 20.11.2020
2. Initial literature search, 20.11.2020 - 05.12.2020
3. Preparing the midterm report, 05.12.2020 - 07.12.2020
4. Midterm report delivery, 07.12.2020
5. Project implementation, 07.12.2020 - 15.01.2020
6. Preparation of final report and final presentation, 15.01.2020 - 22.01.2020
7. Final report and final presentation, 22.01.2020

#### **LIST OF REFERENCES:**

##### **Web Links:**

1. [https://en.wikipedia.org/wiki/Emotion\\_recognition](https://en.wikipedia.org/wiki/Emotion_recognition)
2. <https://www.kaggle.com/c/challenges-in-representation-learning-facial-expression-recognition-challenge/data>
3. <https://www.theguardian.com/technology/2019/mar/06/facial-recognition-software-emotional-science>

##### **Papers:**

1. **Title of article:** Facial emotion recognition using deep learning: review and insights  
**Authors of article:** Wafa Mellouk, Wahida Handouzi  
  
**URL of article:**  
<https://www.sciencedirect.com/science/article/pii/S1877050920318019>
2. **Title of article:** Human emotion recognition by optimally fusing facial expression and speech feature  
**Authors of article:** Xusheng, Xing Chen, Congjun Cao  
  
**URL of article:**  
<https://www.sciencedirect.com/science/article/abs/pii/S0923596520300540>
3. **Title of article:** Robust Representation and Recognition of Facial Emotions Using Extreme Sparse Learning  
**Authors of article:** Seyedehsamaneh Shojaeilangari, Wei-Yun Yau, Karthik Nandakumar, Jun Li and Eam Khwang Teoh  
  
**URL of article:**  
<https://ieeexplore.ieee.org/document/7067419>