

# TERM PROJECT PROPOSALS

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**Project Title:** Emotion Insight: **Precision Facial Emotion Detection (PFED)**

**Project Summary:** This project focuses on harnessing the power of facial recognition technology to detect and interpret emotions displayed on human faces. By leveraging advanced algorithms, we aim to accurately identify to seven classification: happy, sad, angry, afraid, surprised, disgusted and unknown faces.

**Data Source:** I aim to utilize images sourced from Google Images, particularly those depicting real-life reactions in various daily situations. For instance, if I search for "happy persons," I'll obtain a plethora of images capturing individuals displaying happiness in everyday contexts. (Also there are many operations like size, dimension, rotation, data clean etc.)

Alternatively, following some online exploration, I find a dataset specifically curated for facial expressions. In case there are any issues with my current data or if I encounter obstacles in constructing the model, I have access to an additional dataset comprising consistent and reliable information.

**Training Platform:** For now, I'm thinking of training on my own computer. I made this decision because it contains T1200 GPU as a graphics card. However, although I do not know what kind of case when I will encounter during the training.

In any bad case, I can use an online training method such as Colab or Kaggle. Finally, I would like to training on my own computer.