1. Comprehensive Exploration of FER using CML and TL Models

* ***IMP*** – SVMs aren’t considered Deep Learning Techniques so be wary of implementing them, they are just machine learning techniques.
* **SVM**, CNNs, Res-Net, EfficientNet & MobileNet
* MUG Facial Dataset (anger, disgust, fear, happiness, neutral, sadness, and surprise)
* Model accuracy evaluated using precision, recall, accuracy, and F1 score.
* Face Detection done using **Haar Cascade** -> Face region converted to grayscale.
* Facial landmarks identified using **dlib library’s shape predictor**, a regression tree-based ensemble learning tool -> landmarks undergo a normalization process, involving scaling and translation to align them in a standard coordinate frame -> normalized landmarks are then flattened into a one-dimensional array.
* Emotion labels are numerical encoded.

2. Comprehensive Review and Analysis on FER: Performance Insights into Deep and Traditional Learning with Current Updates and Challenges

* Mentions Machine Learning, Deep Learning & Hybrid Techniques
* MobileNetV2 – (speed and accuracy)
* A-MobileNet
* InceptionV3, VGG19, ResnET-50, **DenseNet-161**
* KDEF, SFEW, RAF-DB, FERPlus, CK+, JAFFE, and FER2013 facial expression datasets
* Propose improvements for the VGG16 network.
* accuracy, precision, recall, and F1-score

3. ResEmoteNet

Paper outlines how the model works and so on

CHATGPT LINK: <https://chatgpt.com/share/67b9aa98-0360-8004-b16e-12a7cd3d539e>

<https://github.com/av-savchenko/face-emotion-recognition?tab=readme-ov-file>

<https://github.com/tomas-gajarsky/facetorch>

<https://github.com/ArnabKumarRoy02/ResEmoteNet/tree/main?tab=readme-ov-file#checkpoints>