Low resolution face recognition

1. <mark>Due date: 12 February 2023</mark>

2. The model super resolution
   a. U-net GAN
   b. DCSCN
3. Dataset for super resolution
   a. LFW
   b. TinyFace
4. Measurement for super resolution
   a. PSNR
   b. SSIM
5. The model for face recognition
   a. ResNet50
   b. MobileNetV2
6. Dataset for face recognition
   a. The result of super resolution
7. Measurement for face recognition
   a. Confusion matrix
8. Workflow
   a. U-Net GAN combine with ResNet50
   b. U-Net GAN combine with MobileNetV2
   c. DCSCN combine with ResNet50
   d. DCSCN combine with MobileNetV2
   e. Measure U-Net GAN and DCSCN using PSNR and SSIM
   f. Measure ResNet50 and MobileNetV2 using confusion matrix
9. Notebook
   - Google colab
10. Expected results:
    - Accuracy 88%-100%
11. Aiming
    a. <mark>combine which pair of super resolution and face recognition has the best results</mark>
    b. <mark>which model uses the least resources</mark>