NTNU

Norwegian Biometrics Laboratory (NBL) is a distinguished research lab contributing actively to the biometrics research across Europe. NBL spans its expertise over physiological and behavioral biometrics including 2D & 3D face, iris, fingerprint, hand vein, gait, keystroke, gesture and mouse dynamics recognition.

Bachelor/Master Thesis
Face Image Radial Distortion Quality Assessment

OBJECTIVES & GOALS:

The performance of facial biometric systems, such as face recognition systems is heavily influenced by the quality of the images presented to them. The quality of a facial image is subject to many quality measures. One of these measures is radial distortion, known as the fish eye effect, which distorts the image of the subject and creates a hemispherical (panoramic) effect. How to detect this type of distortion and map it to a continuous scalar value?

TASKS:

- Implement a method to detect radial distortion in a face image and produce a score reflecting how severe the distortion is.
- Systematically evaluate and report the impact of radial distortion on the performance of a chosen face recognition (FR) model.

PREREQUISITES:

- High motivation and creativity
- Strong interest in research
- Programming experience

CONTACT:

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NOTE: Highly qualified foreign students can get financial support to cover the cost of an internship.