

K-nearest neighbors (KNN) algorithm for face recognition

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Projec

- List of planned analysis steps
- Milestones (important achievements)
- Deliverables (result for each milestone)
- Approximate timetable

Project development

- Research into literature
- Dataset analysis and reduction using PCA
- Implementing KNN function for face recognition
- Evaluating results
- Dataset extension
- Real-time face recognition
- Find a new dataset?

Dataset

- 2.535 images from 39 subjects
- 65 images per subject
- grayscale images normalized by size and stored as PGM



Milestones

- Data normalisation by illuminosity?
- PCA implementation (advantages of PCA)
- Noise reduction using image clipping (reason the choise of filter)
- Border recognition (using KNN)

KNN (explanation)