Numerical Analysis Project (Persian Digits Recognition)
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This project use feature extractor and classification algorithm to detect 0-11 digit of [HODA Farsi Digit Dataset](#).

Classification Algorithm

- KNN
- Bayes
- LinearSVC

Feature Extractor Algorithm

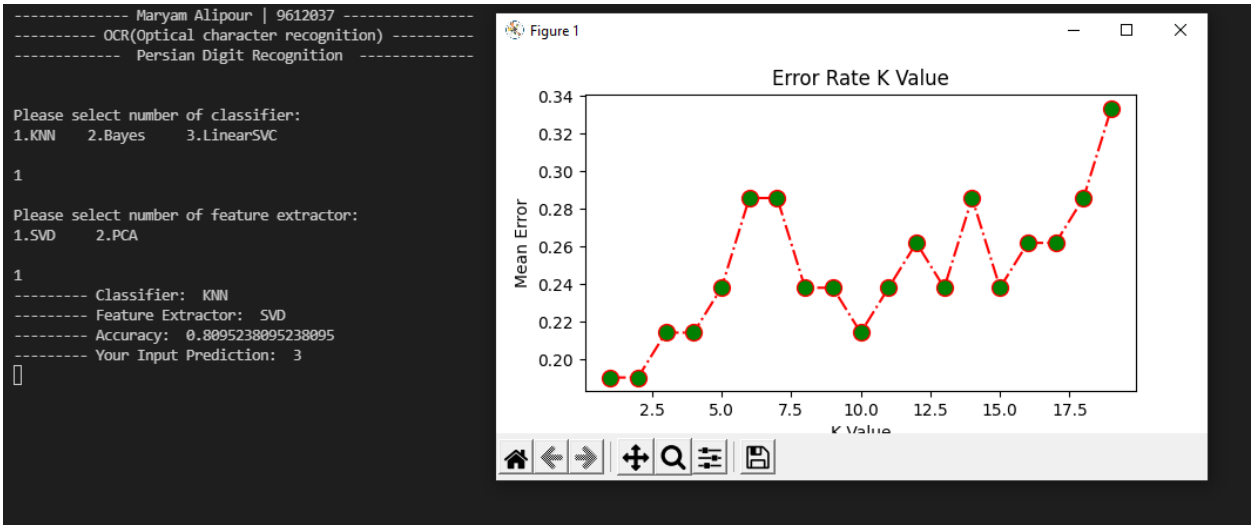
- SVD
- PCA

Install requirements

pip install opencv-python, numpy, matplotlib, sklearn

Usage

You can specify the photo path of your example on line 191. Default example is “example_image.jpg” which is the number 3. Run main.py script. After executing the code you can select the decomposition and classification algorithm in the terminal.



KNN - SVD