

Description

An implementation of PCA using Power Method in computing SVD

Code Structure

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├── ImgOps.py //implementation of PCA using power_method() in PowerMethod.py
├── ImgOps_naive.py //implementation of PCA using the naive svd() in svd.py
├── PowerMethod.py //our implementation of the required power_method() can be found in
this OOP encapsulation.
├── README.md //this file
├── main.py //generating PCA compressed images using ImgOps.py
├── out_img //PCA image output directory
|   ├── mackey-1.png
|   ├── mackey-10.png
|   ├── mackey-15.png
|   ├── mackey-2x3.png
|   └── mackey-5.png
├── src_img //PCA image input directory
|   ├── jacobbo.png
|   ├── mackey.png
|   └── scs.png
├── svd.py //implementation of naive SVD
└── timing.py //generating timing statistics
```

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