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threshold: 1.7976931348623157e+308
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0., 0., 0.00173611112, 0.00520833349,
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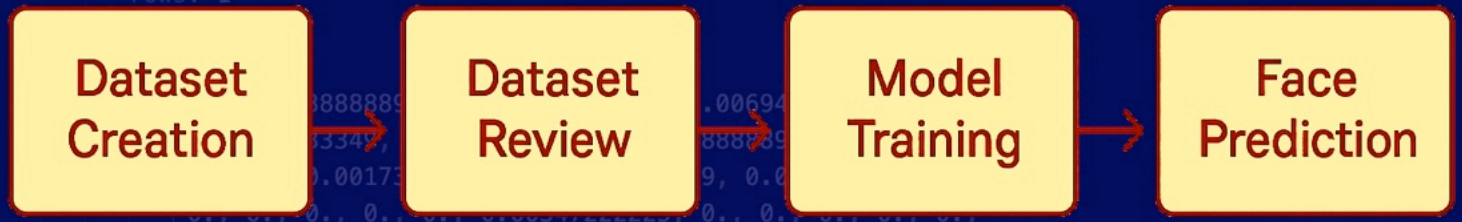
0., 0., 0., 0.00173611112, 0., 0., 0., 0., 0., 0., 0., 0.,
Every AI
is not ML

Face Recognition Pipeline



Detect & save faces (Haar Cascade)

Manual Cleanup

Train **LBPH** model (feature extraction & storage)

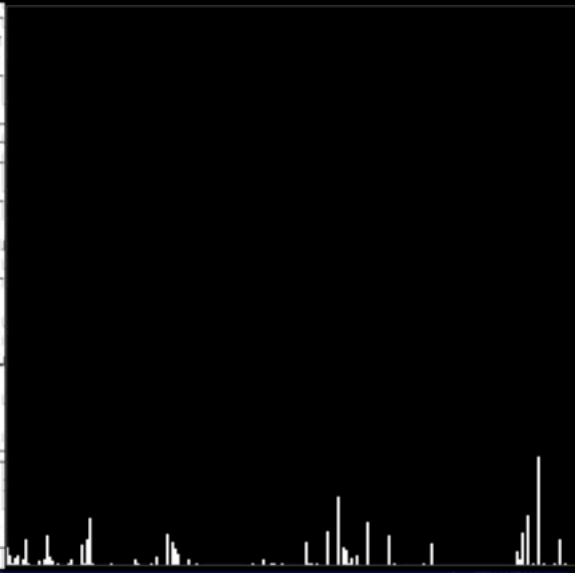
Compare **LBPH** histograms to recognize (more in the next session)

```
%YAML:1.0
---
opencv_lbphfaces:
   threshold: 1.7976931348623157e+308
```

Original

Local Binary Patterns (LBP)

LBP Histogram



```
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0.00173611112, 0., 0., 0., 0., 0., 0., 0., 0.00520833349,
0., 0., 0., 0.00173611112, 0., 0., 0., 0., 0., 0., 0., 0.,
```

LBPH (Local Binary Patterns Histograms):

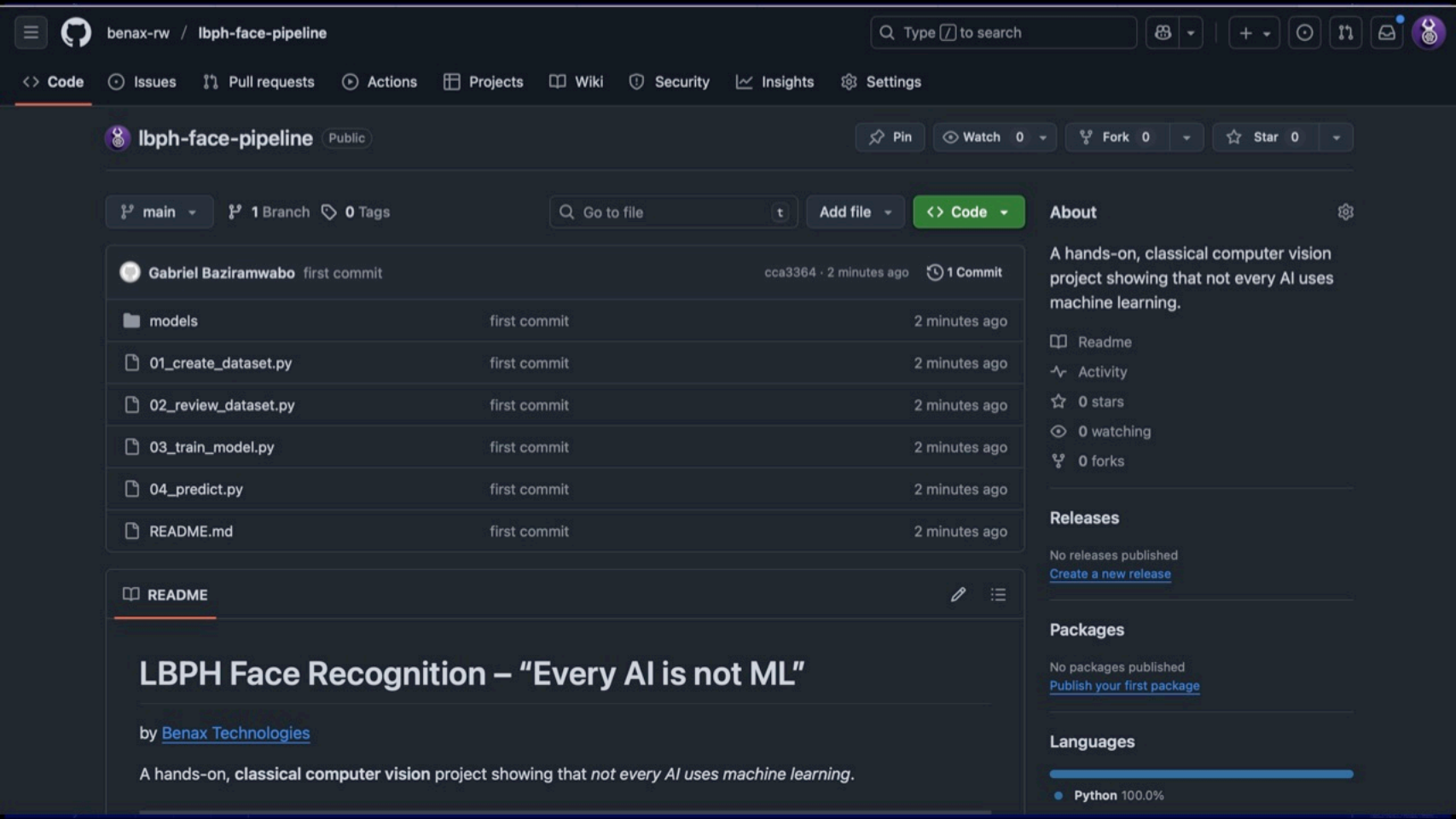
A specific algorithm inside Computer Vision field used for texture analysis.

It's just one among many:

- **Haar Cascades (face detection)** > Used in the current session
- **HOG (Histogram of Oriented Gradients)**
- **SIFT, SURF (feature detection & matching)**
- **Optical Flow (motion tracking)**
- **Edge detection (Canny, Sobel)**
- **Color histograms, Contour analysis, etc.**

LBPH Face Recognition Pipeline

1. **Create Dataset** – Detect, crop, and save face images.
2. **Review Dataset** – Remove blurred or poor-quality samples.
3. **Train Model** – Use LBPH to learn texture patterns per face.
4. **Recognize Faces** – Predict names from live camera input.


benax-rw / lbph-face-pipeline
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
lbph-face-pipeline
Public
Pin
Watch 0
Fork 0
Star 0
main
1 Branch
0 Tags
Go to file
t
Add file
Code
Gabriel Baziramwabo first commit
cca3364 · 2 minutes ago
1 Commit
models first commit 2 minutes ago
01_create_dataset.py first commit 2 minutes ago
02_review_dataset.py first commit 2 minutes ago
03_train_model.py first commit 2 minutes ago
04_predict.py first commit 2 minutes ago
README.md first commit 2 minutes ago
README
LBPH Face Recognition – “Every AI is not ML”
by Benax Technologies
A hands-on, classical computer vision project showing that not every AI uses machine learning.
About
A hands-on, classical computer vision project showing that not every AI uses machine learning.
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