FACE

Facial **A**cquisition, **C**omparison and **E**nforcement

A Game Changer from
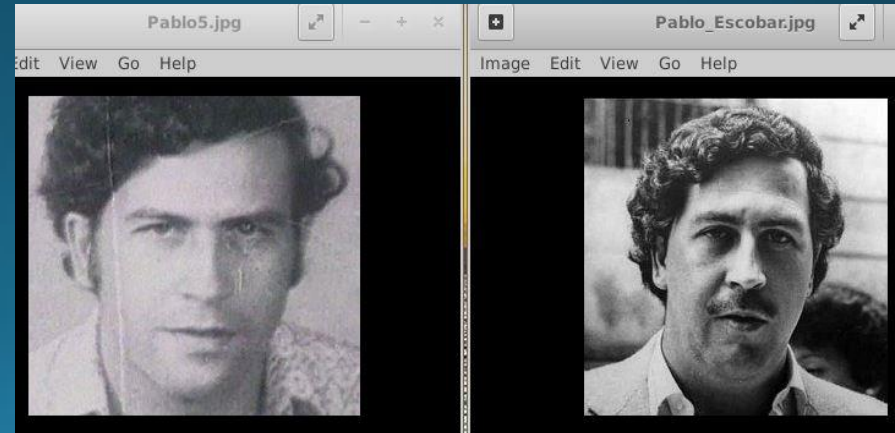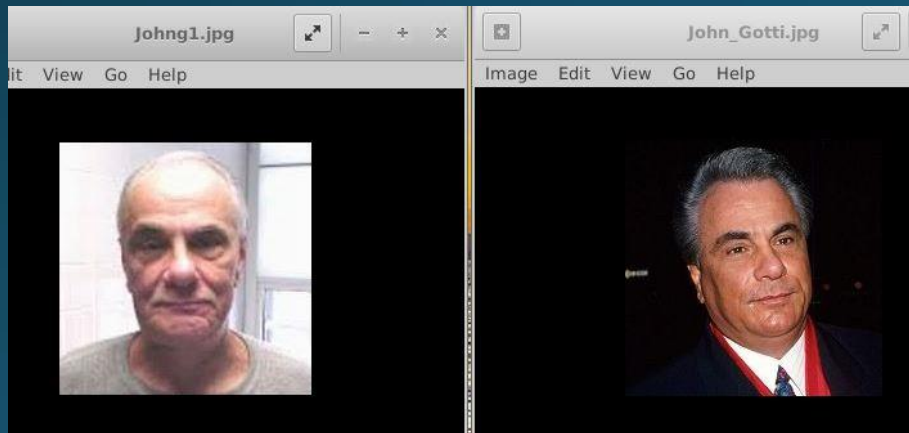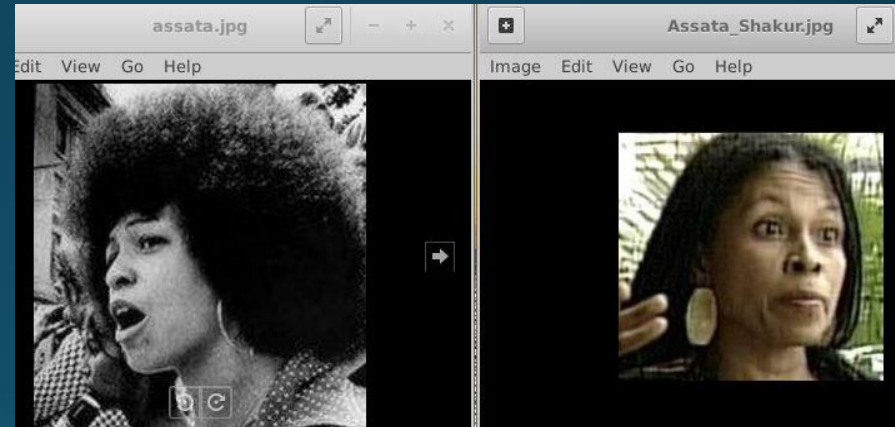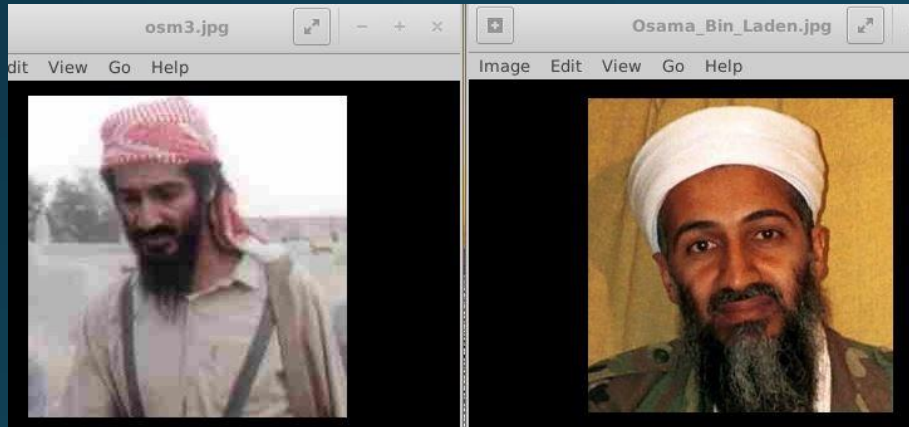KGH & RT

Do You See What I See?

Find matched Suspects in *seconds…*

FACE
Facial Acquisition, Comparison and Enforcement

- Homeland and National Security/Defense
- Identity Management
- Fraud Reduction
- C-Trafficking: Human; Smuggling; Child Predator

Inexpensive, Fast, Accurate, & Flexible

- Advanced Deep Machine Learning Algorithms

- Big Datasets

- 99.5% accuracy achieved

- Will retrain the models to your specifications

- Will work with organizational or standalone datasets:
    - Age: Progression and Regression
    - Ethnicity
    - Nationality
    - Known/Suspected Identification

How It Works: A High Level View

- Deep Machine Learning
  - An initial database of several million faces was used as input
  - Next Developments: Sentiment & Intention Forecasting
- Continuous Learning Capability
- Accuracy:
  - An accuracy of 99.5% was achieved on the standard LFW face recognition benchmark, is comparable to most state-of-the-art methods for face recognition as of mid 2017

Simple Deployment Methods

- Facial Recognition in a Box – Hardware Version
  - An appliance – A turnkey solution - Plug and Play
  - Minimum training
  - Perfect for a mass deployment of one or many databases to multiple departments
- Virtual Server – Software Version
  - Run locally or in a Cloud *of your choice*

- Multiple instances of the same solution could reside in one physical server
- Enterprise level solutions in any Cloud – Amazon, Microsoft, Google
  - Intra-agency and Inter-agency
  - Share facial databases at local, state, and federal levels

A Few Comparisons