

# Suspect Report Generator

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Final Project

# Motivation

- Automate portions of writing a criminal report
- Save time and resources for criminal justice
- Explore FACIAL DETECTION via Viola Jones Algorithm
- Explore the MATLAB Computer Vision Toolbox
- Product for submission as court evidence

# Tools

- MATLAB Computer Vision Toolbox
  - Viola Jones Algorithm

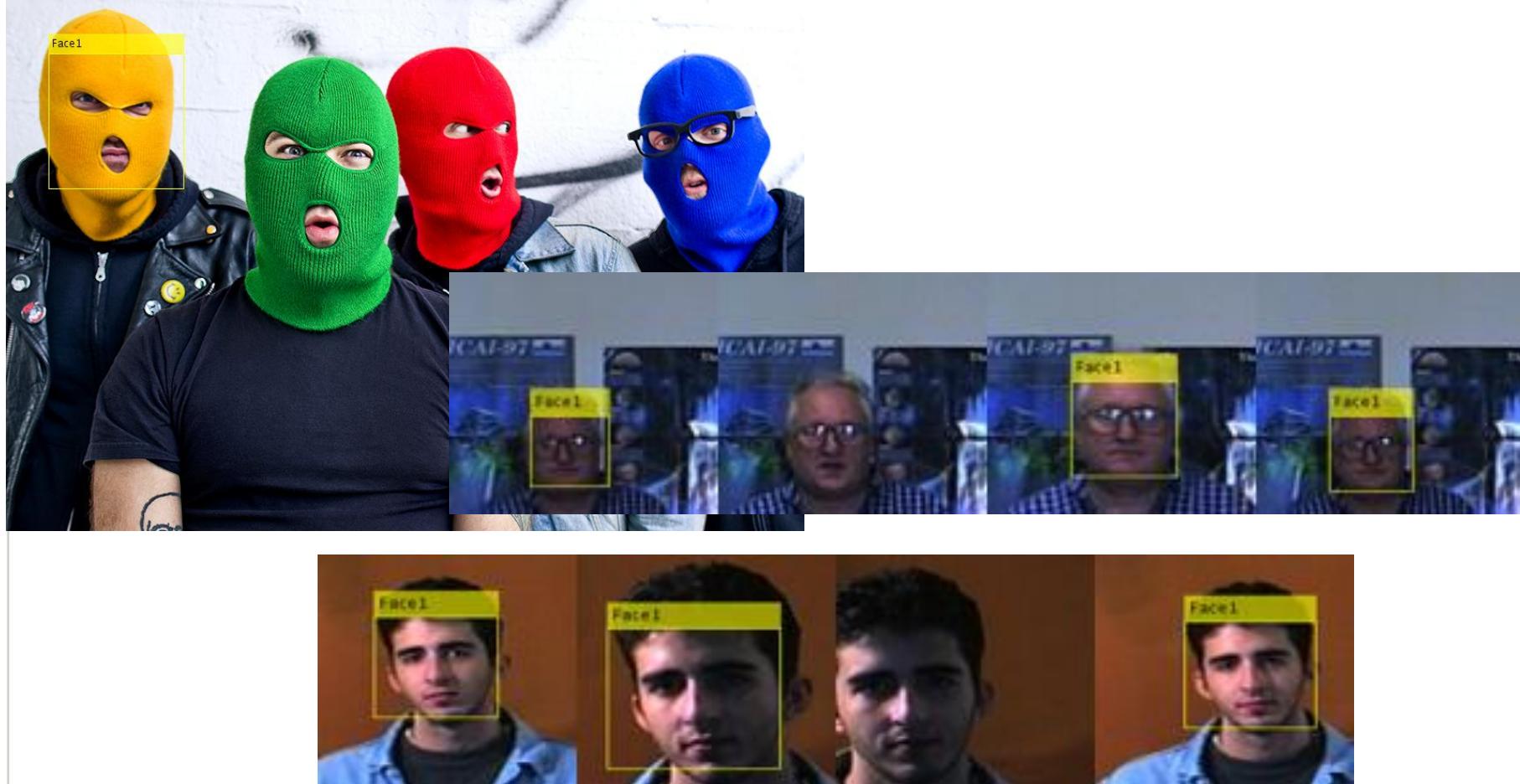
```
frame = imread(image);  
detector = vision.CascadeObjectDetector();  
step(detector, frame);
```

- MATLAB Report Generator
  - DOM API
  - HTML document part templates

# Successes



# Interesting Cases



# False Positive



# DEMO

# Limitations

- Portions of faces out of frame or hidden
- Disguises (except for yellow masks...)
- Difficult background/extreme shadowing

# Future Extensions

- Additional Object Detection
  - Text/Landmarks
  - Profile Faces/Clothing
  - Suspect demographics
  - Weapons
- Automate Suspect Information Collection
  - Computer Vision to determine behaviors exhibited in image or video
  - Disparity Maps to estimate suspect height