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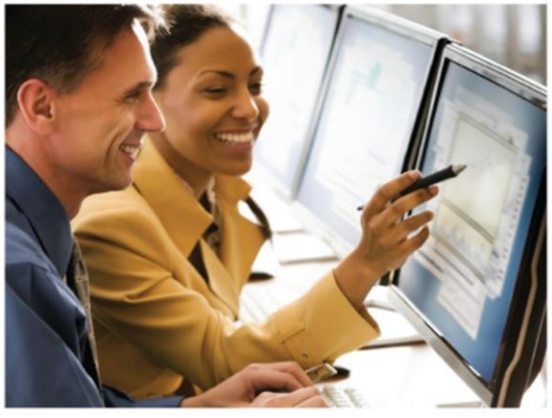
Exercises: Importing and Visualizing Videos

AUVSI Foundation: Computer Vision Training



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Video File Import

The `vipwarnsigns.avi` video shows a camera mounted on a vehicle viewing traffic signs as the vehicle moves around. In this exercise, you will view this video using MATLAB®.

1. Create a video file reader system object to read this video file.
2. Set the output color space to RGB.
3. Set the output data type to `uint8`.
4. Create a deployable video player object to view the video.
5. Acquire frames using the video file reader and display them in the video player until all the frames have been read.

Solution

```
>> importVideoFile
```

Video Camera Acquisition

In this exercise, you will use a camera to acquire video frames and display them in MATLAB.

1. Create a VideoDevice System object.
2. Determine the list of available video formats.
3. Set the returned video format to 640-by-480, or the closest available resolution.
4. Set the output data type to `uint8`.
5. Create a deployable video player object to view the video.
6. Acquire frames for 10 seconds and display them in the video player.

Solution

```
>> acquireVideoCamera
```