

Name

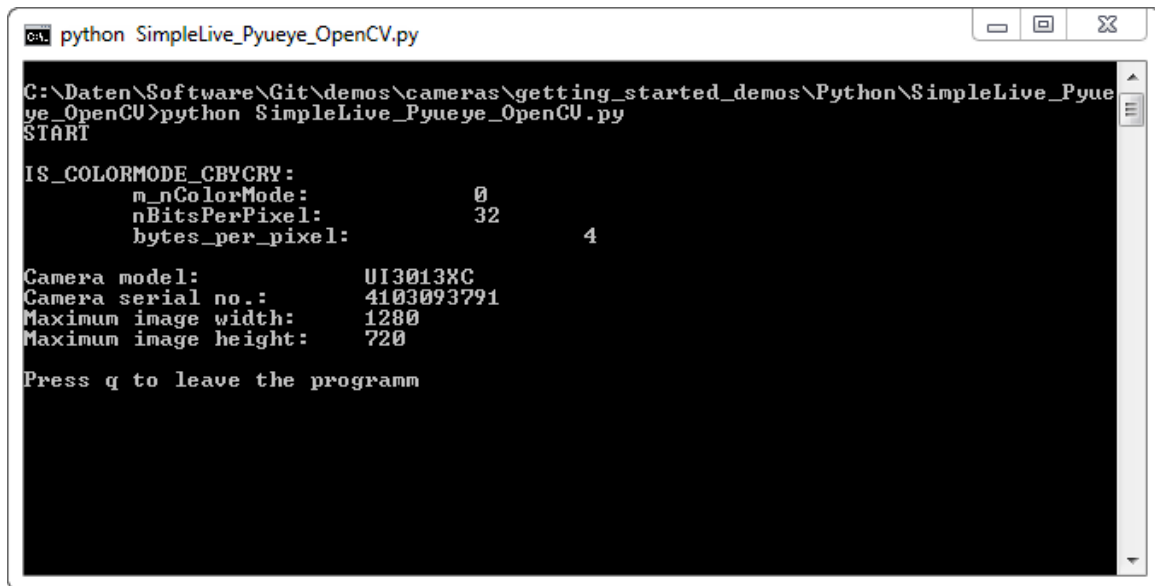
SimpleLive_PYUEYE_OpenCV

**Programming language and interface**

IDS Software Suite:	V4.90.6	
uEye SDK	<input checked="" type="checkbox"/> Python 3.6.3	<input checked="" type="checkbox"/> OpenCV 3.4.0
Platform of executable file:	<input checked="" type="checkbox"/> 32-bit	<input checked="" type="checkbox"/> 64-bit
Development platform:	PyCharm community	
Operating system	<input checked="" type="checkbox"/> Windows	<input checked="" type="checkbox"/> Linux

Description

This sample shows the basic idea how to continuously capture images using the PyuEye interface in combination with OpenCV.



```
python SimpleLive_Pyueye_OpenCV.py
C:\Daten\Software\Git\demos\cameras\getting_started_demos\Python\SimpleLive_Pyueye_OpenCV>python SimpleLive_Pyueye_OpenCV.py
START
IS_COLORMODE_CBPCRY:
    m_nColorMode:          0
    nBitsPerPixel:        32
    bytes_per_pixel:      4
Camera model:             UI3013XC
Camera serial no.:       4103093791
Maximum image width:     1280
Maximum image height:    720
Press q to leave the programm
```

External dependencies

```
from pyueye import ueye
import numpy as np
import cv2
import sys
```

Among others, uEye API functions/methods used

```
ueye.is_InitCamera
ueye.is_ExitCamera

ueye.is_GetCameraInfo
ueye.is_ResetToDefault
ueye.is_SetDisplayMode
ueye.is_AOI

ueye.is_AllocImageMem
ueye.is_SetImageMem
ueye.is_SetColorMode

ueye.is_CaptureVideo
ueye.is_InquireImageMem

ueye.get_data

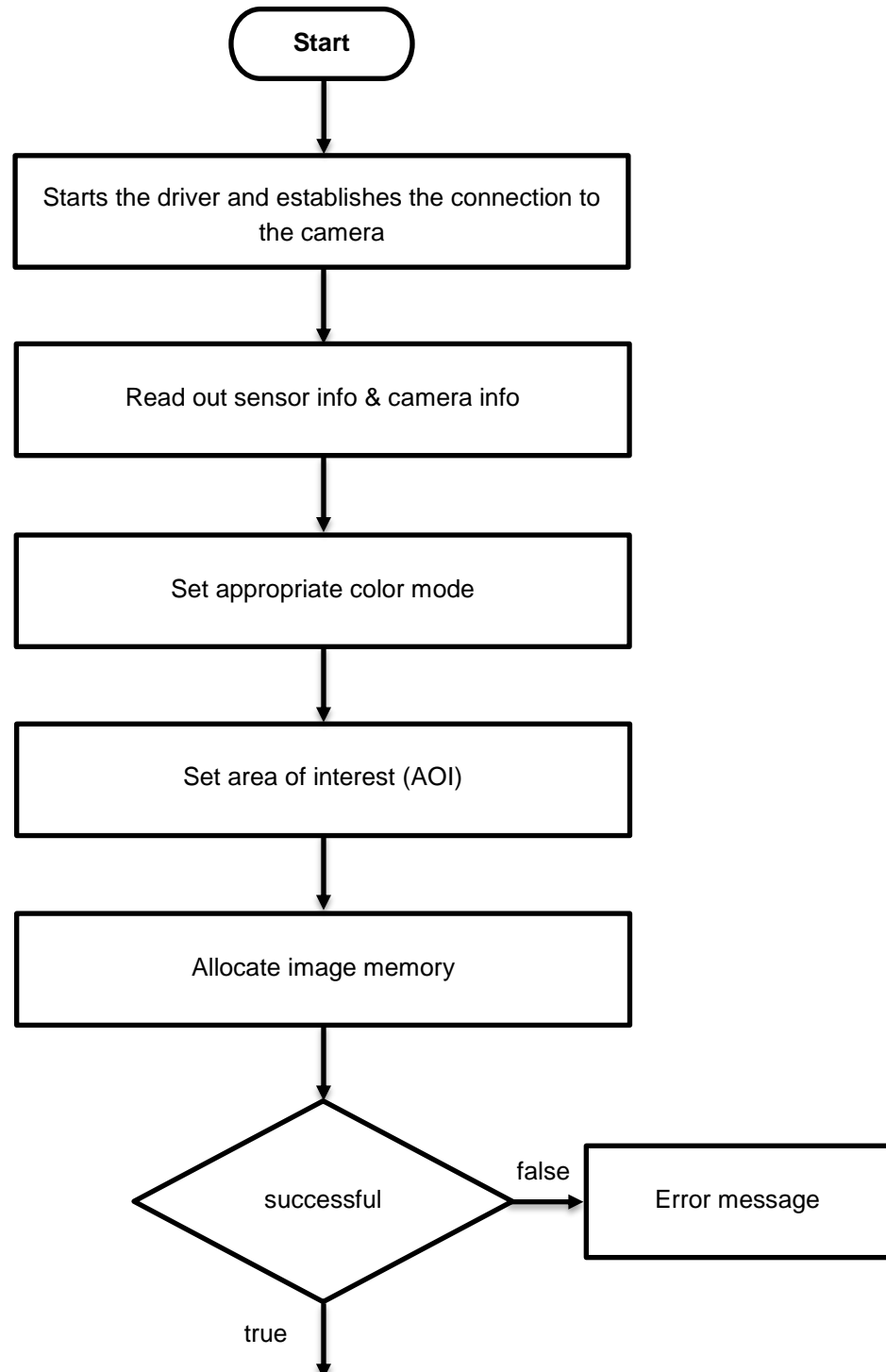
np.reshape
```

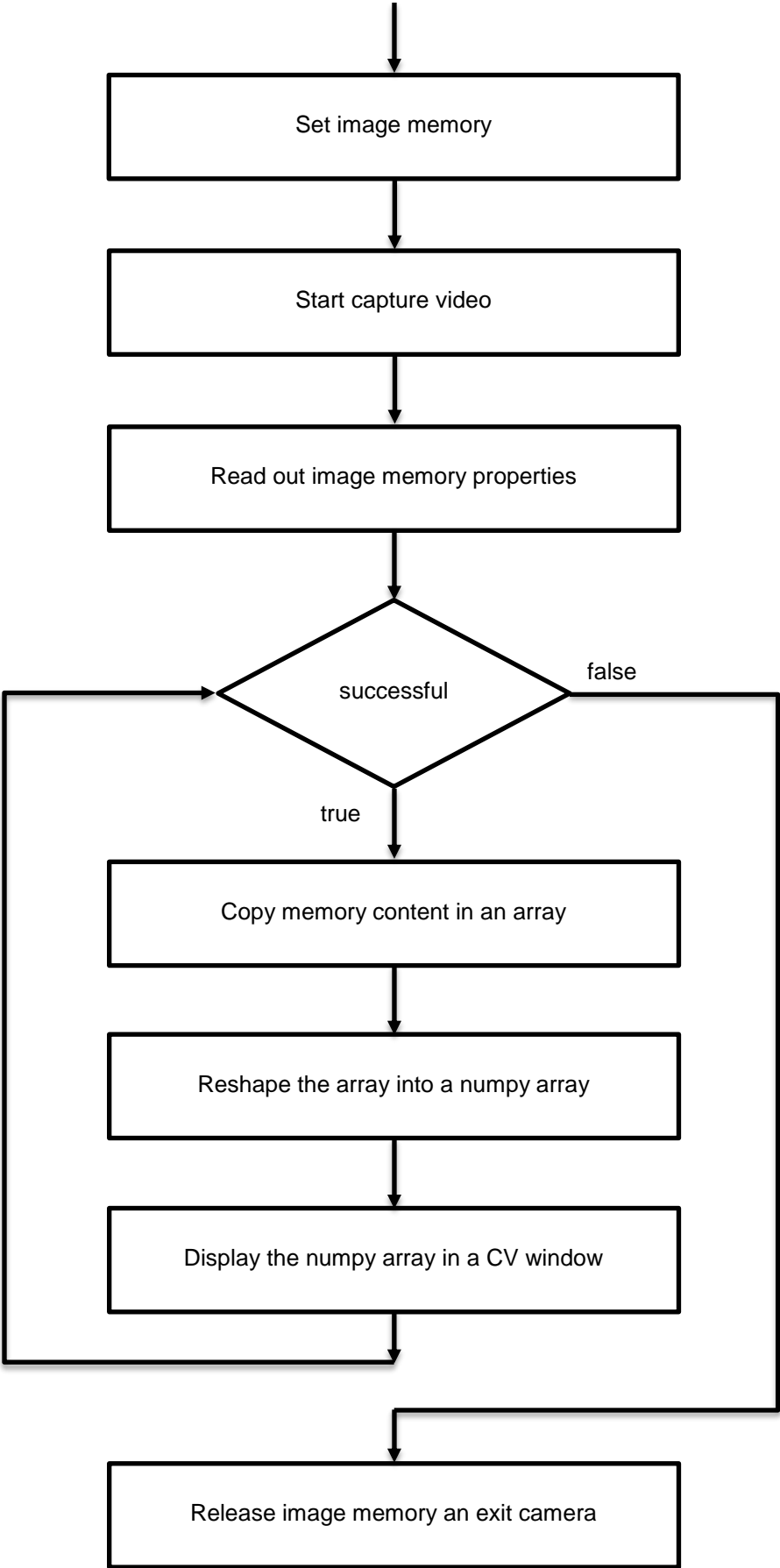
```
cv2.resize  
cv2.imshow
```

```
ueye.is_FreeImageMem  
ueye.is_ExitCamera
```

Flowcharts

The flowcharts below show how the most interesting parts of the sample software work. The flowcharts do not cover the whole application.





Cameras

All uEye camera models. Note that XS and UI-3013XC camera might require an extra handling.

Contact

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