

## LABORATORY #1a



• Create the following function:

```
void myfilter2D(
  const cv::Mat& src,
  const cv::Mat& krn,
  cv::Mat& out,
  int stride=1
);
```

## myfilter2D()



- Src  $\rightarrow$  single channel uint8
- Krn  $\rightarrow$  single channel float32, odd size
- Out  $\rightarrow$  single channel int32 (signed!)
- Stride  $\rightarrow$  integer, default to 1

## myfilter2D()



- Constraints:
  - The use of at<T> is not allowed
- Hints:
  - Displaying 32S or 32F images can be tricky, look at the provided code
- Tests
  - Using the provided code and images, compare the results wrt the OpenCV functions cv::Sobel and cv::Filter2D