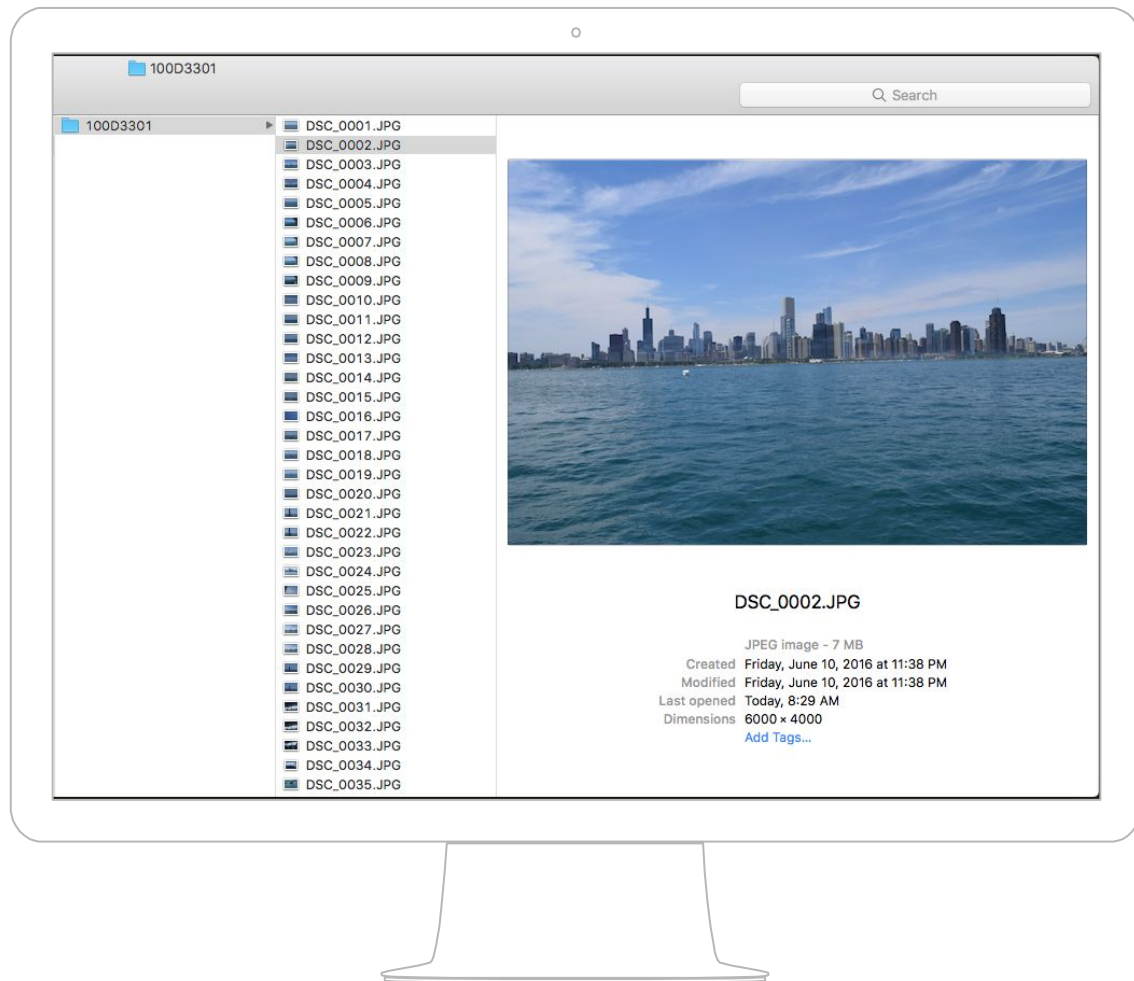


IDENTIFYING **BLURRY PHOTOS** WITH AI

Prashant Tatineni



**Automatically
delete low-quality
shots from my photo
library using artificial
intelligence**



Photo sources

- ▶ 1200 images from a research dataset



- ▶ Added Gaussian blurring
- ▶ My own photos for validation



Modeling with a Convolutional Neural Net



0	0	0	100	0
0	0	100	0	0
0	100	0	0	0
0	100	0	0	0
0	100	0	0	0



10	25	25	50	25
25	25	50	25	10
25	50	25	25	10
25	50	25	10	10
25	50	25	10	0

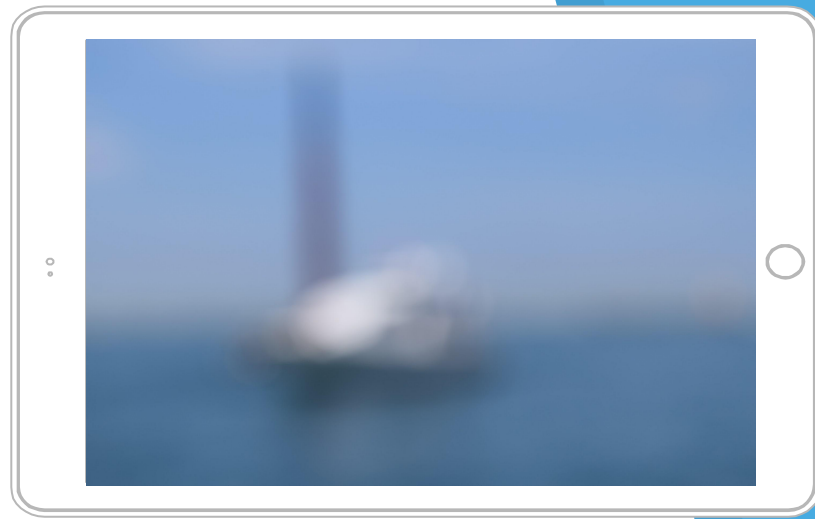


Modeling with a Convolutional Neural Net

The trained neural network
correctly identified **99.7%** of new
images it had never seen before



Test images from my Library



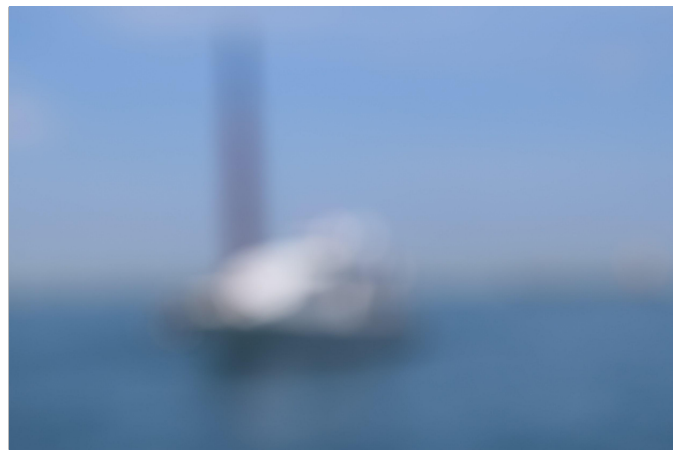


Test images from my Library

**Classified as
Clear**



**Classified as
Blurry**





Blurry Images from Dataset





Blurry Images from Dataset

**Classified as
Blurry**



**Classified as
Clear**





Test image from my Library





Test image from my Library

Classified as Clear





CREDITS

- ▶ E. Mavridaki, V. Mezaris, "No-Reference blur assessment in natural images using Fourier transform and spatial pyramids", Proc. IEEE International Conference on Image Processing (ICIP 2014), Paris, France, October 2014.
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- ▶ "A Beginner's Guide To Understanding Convolutional Neural Networks" by Adit Deshpande, UCLA
- ▶ docker.com
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- ▶ Presentation template by SlidesCarnival