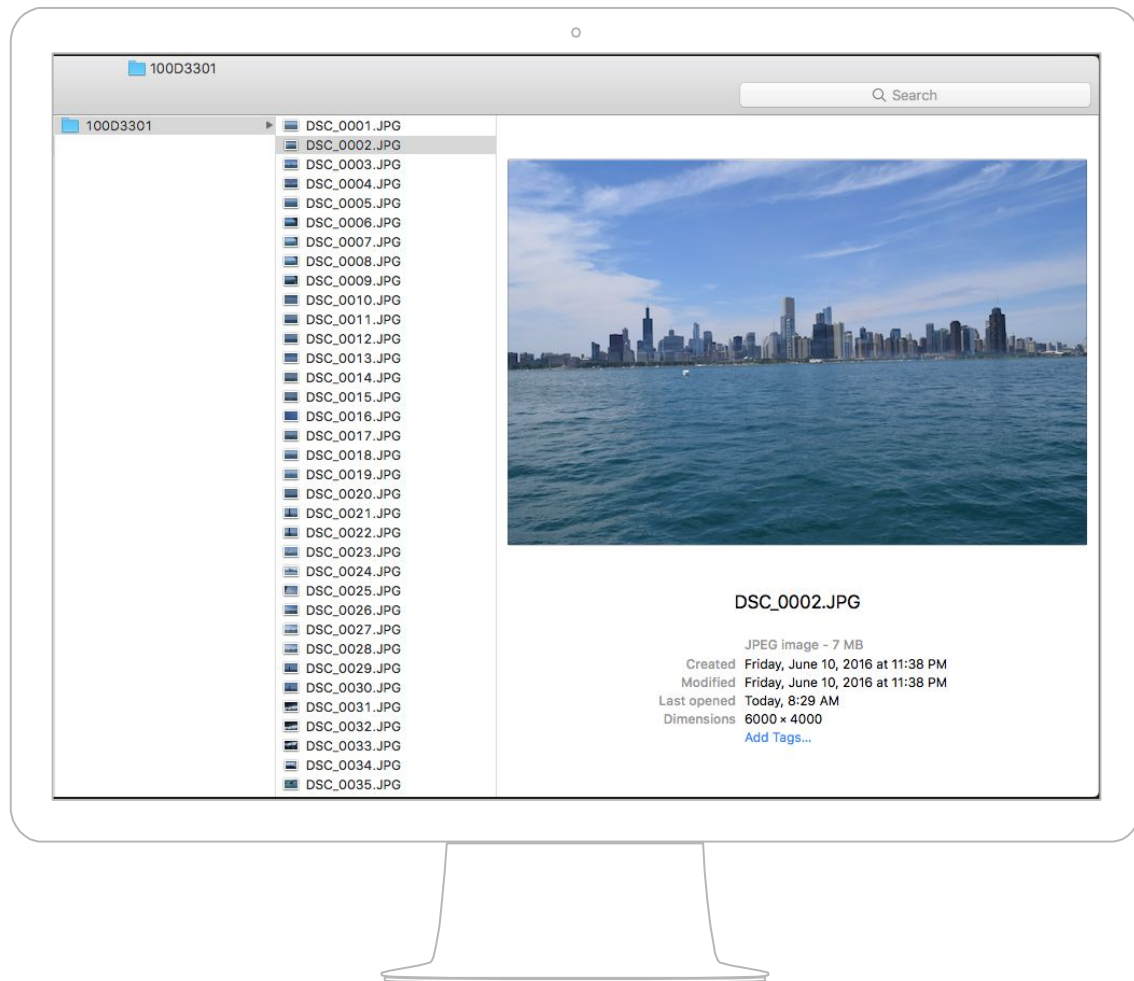


# IDENTIFYING **BLURRY PHOTOS** WITH AI

**Prashant Tatineni**

**Metis Chicago**  
**April 2017**



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



# Photo sources

- ▶ 1200 images from a research dataset



- ▶ 800 naturally blurry images from research dataset
- ▶ My own photos



# 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

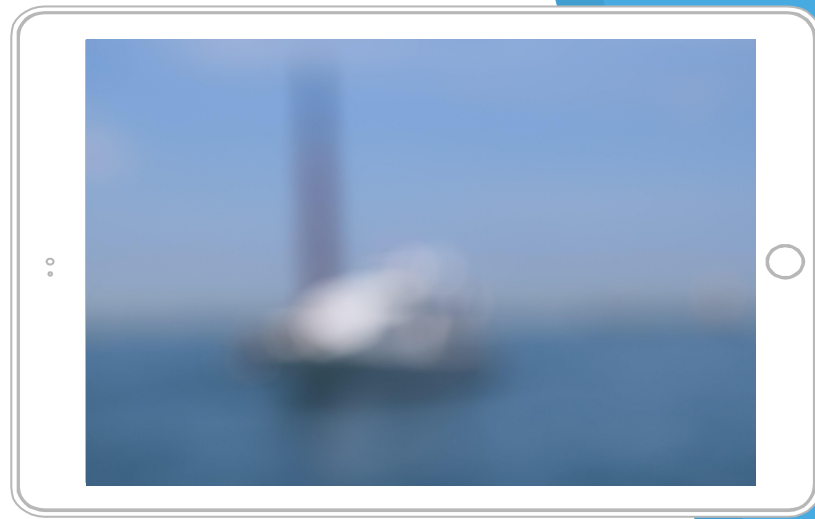


# Modeling with a Convolutional Neural Net

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



# Test images from my Library



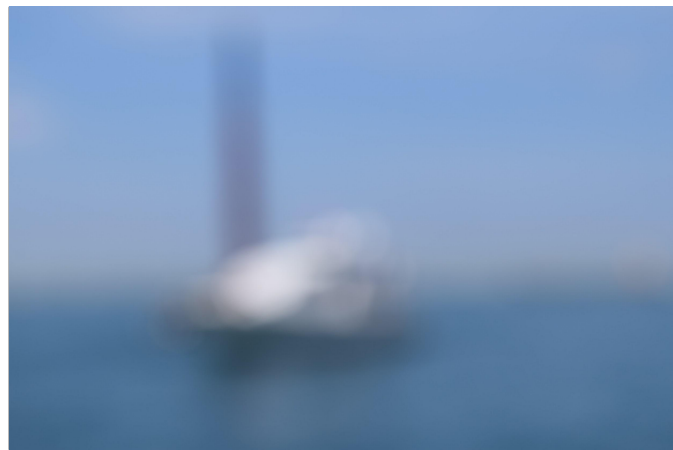


# Test images from my Library

**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



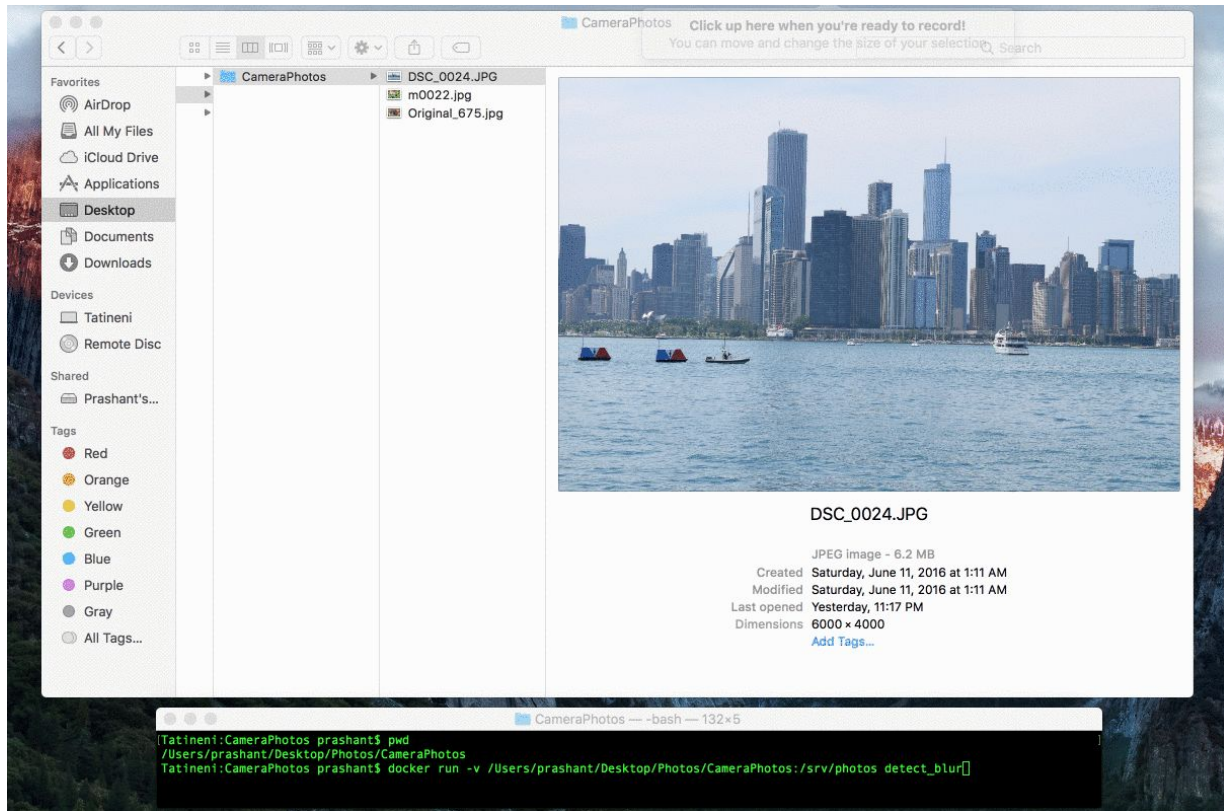


# Test image from my Library

**Classified as Clear**

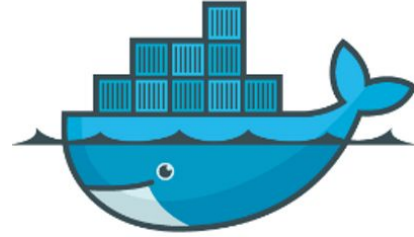
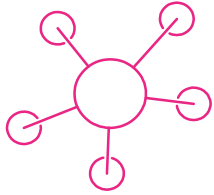






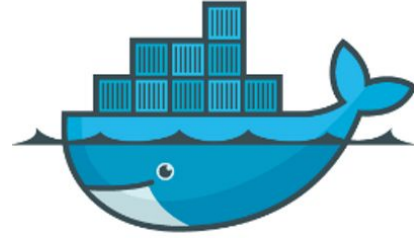
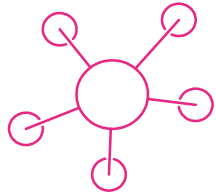


# A Desktop Implementation





# A Mobile Implementation



heroku

# THANKS!



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# CREDITS

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