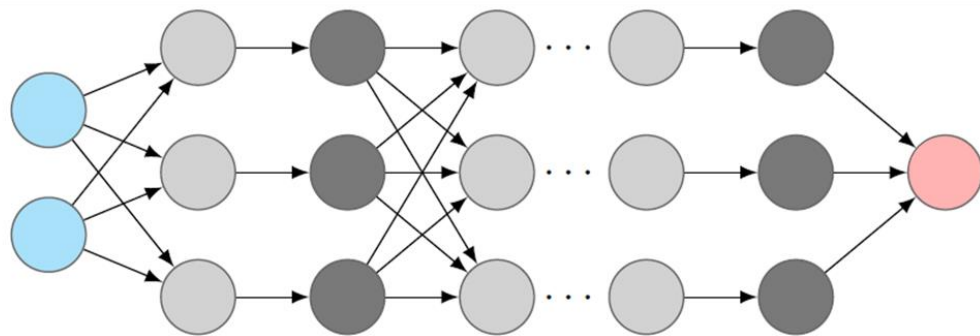


Convolutional Neural Networks

- Possible Projects -

Lecturer: Michael Möller – michael.moeller@uni-siegen.de

Exercises: Hartmut Bauermeister – hartmut.bauermeister@uni-siegen.de





Featured Prediction Competition

Humpback Whale Identification

Can you identify a whale by its tail?



Kaggle · 214 teams · 3 months to go (3 months to go until merger deadline)

\$25,000

Prize Money

- **1st Place** - \$10,000
- **2nd Place** - \$7,500
- **3rd Place** - \$ 2,500
- **4th Place** - \$ 2,500
- **5th Place** - \$ 2,500

Until Feb. 21st

See <https://www.kaggle.com/competitions>
for updates on challenges

Classification



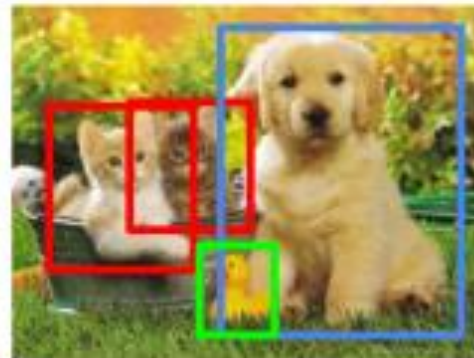
CAT

Classification + Localization



CAT

Object Detection



CAT, DOG, DUCK

Instance Segmentation



CAT, DOG, DUCK

Single object

Multiple objects

https://leonardoaraujosantos.gitbooks.io/artificial-intelligence/content/object_localization_and_detection.html

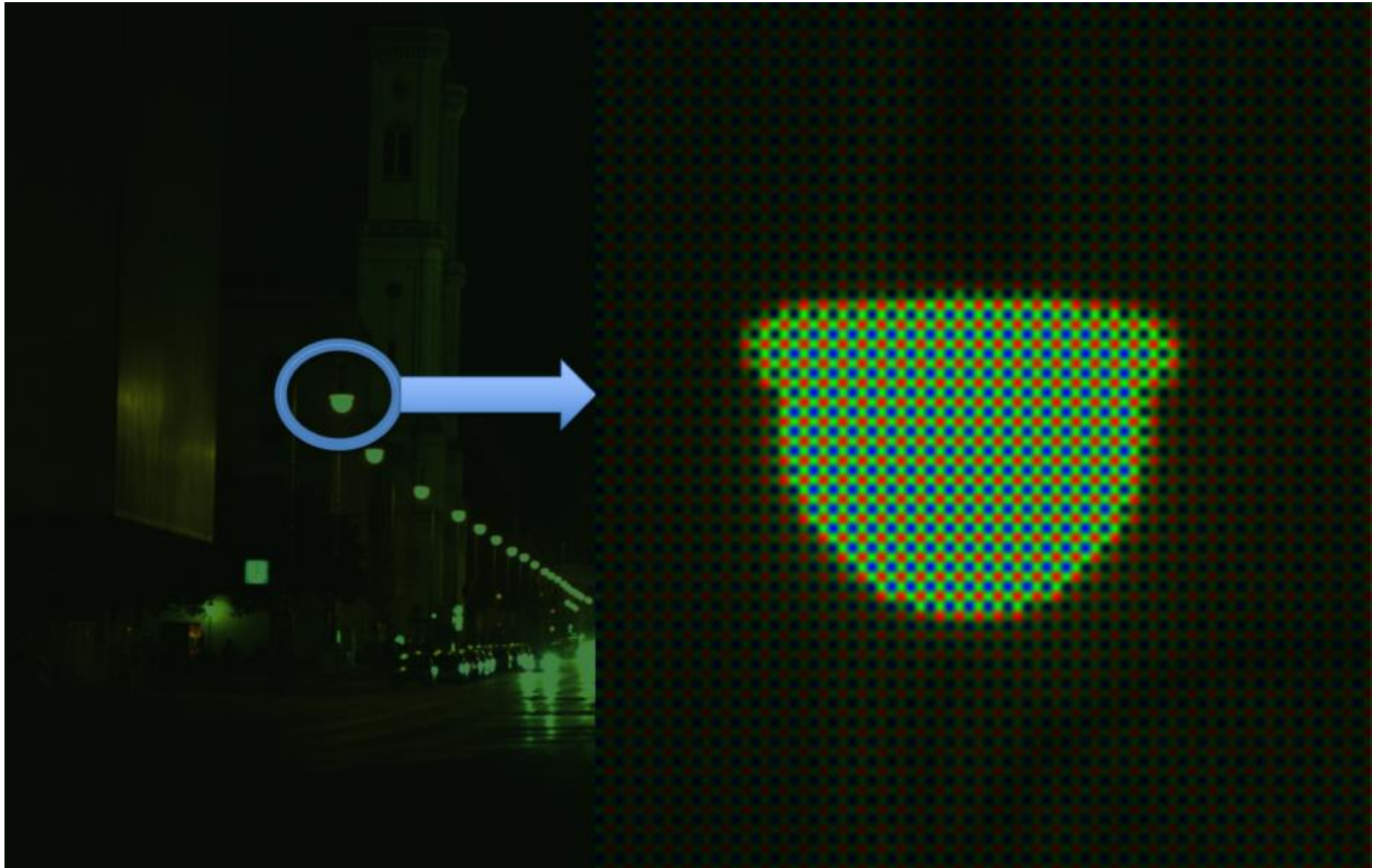
Featured Prediction Competition

Airbus Ship Detection Challenge

Find ships on satellite images as quickly as possible

\$60,000
Prize Money

Airbus · 884 teams · 20 days ago



bicubic
(21.59dB/0.6423)



SRResNet
(23.53dB/0.7832)



SRGAN
(21.15dB/0.6868)



1 Upload photo

The first picture defines the scene you would like to have painted.



2 Choose style

Choose among predefined styles or upload your own style image.

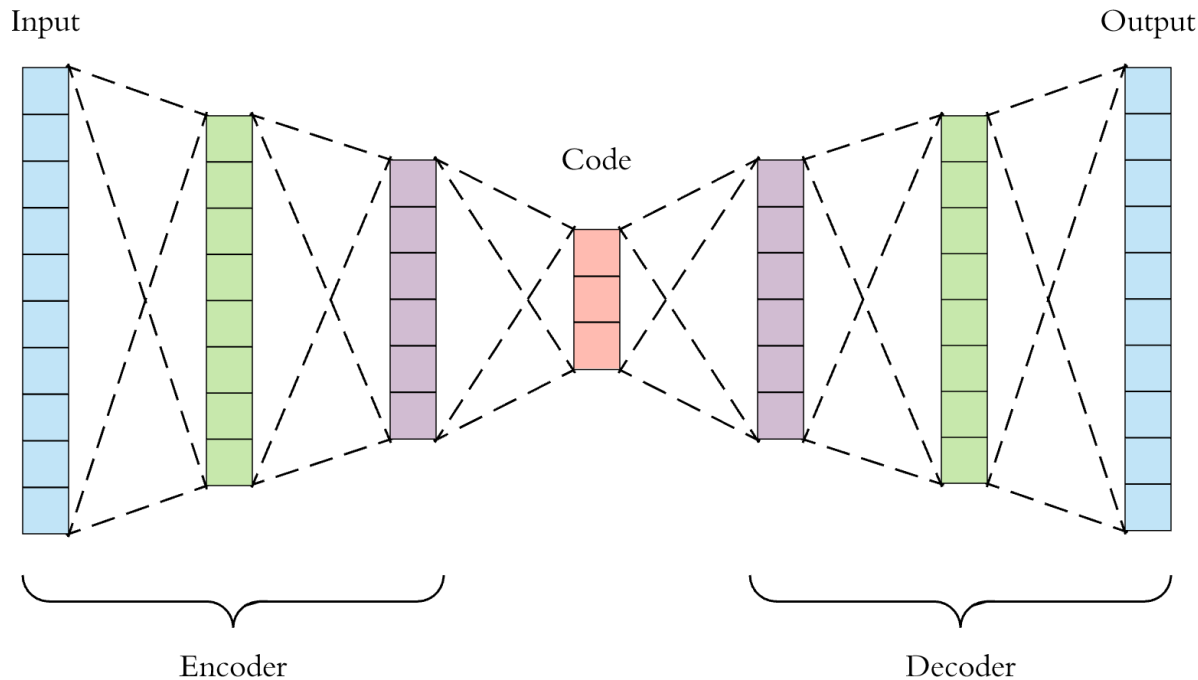
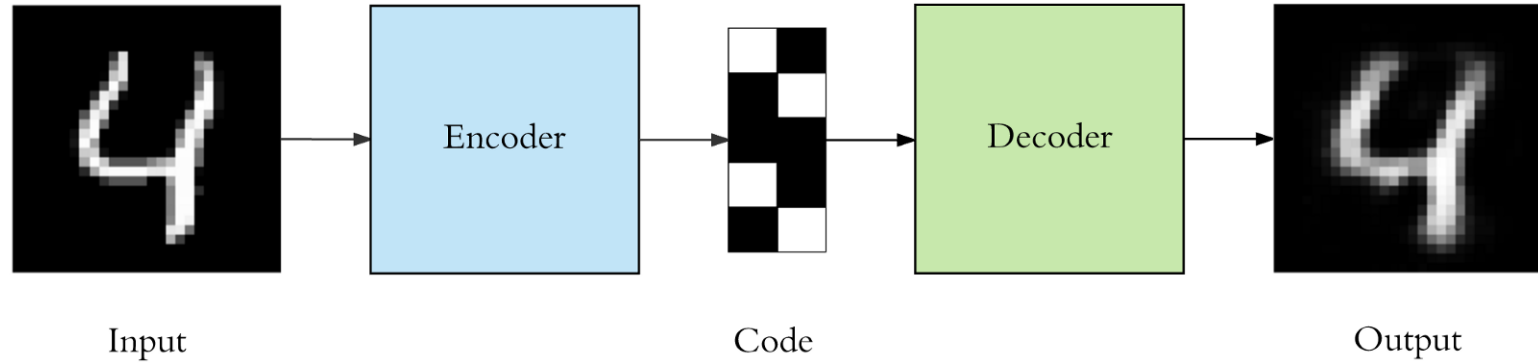


3 Submit

Our servers paint the image for you. You get an email when it's done.



<https://deepart.io/>



Can you beat the
JPG compression
your computer?

Brushing teeth



Cutting trees

