



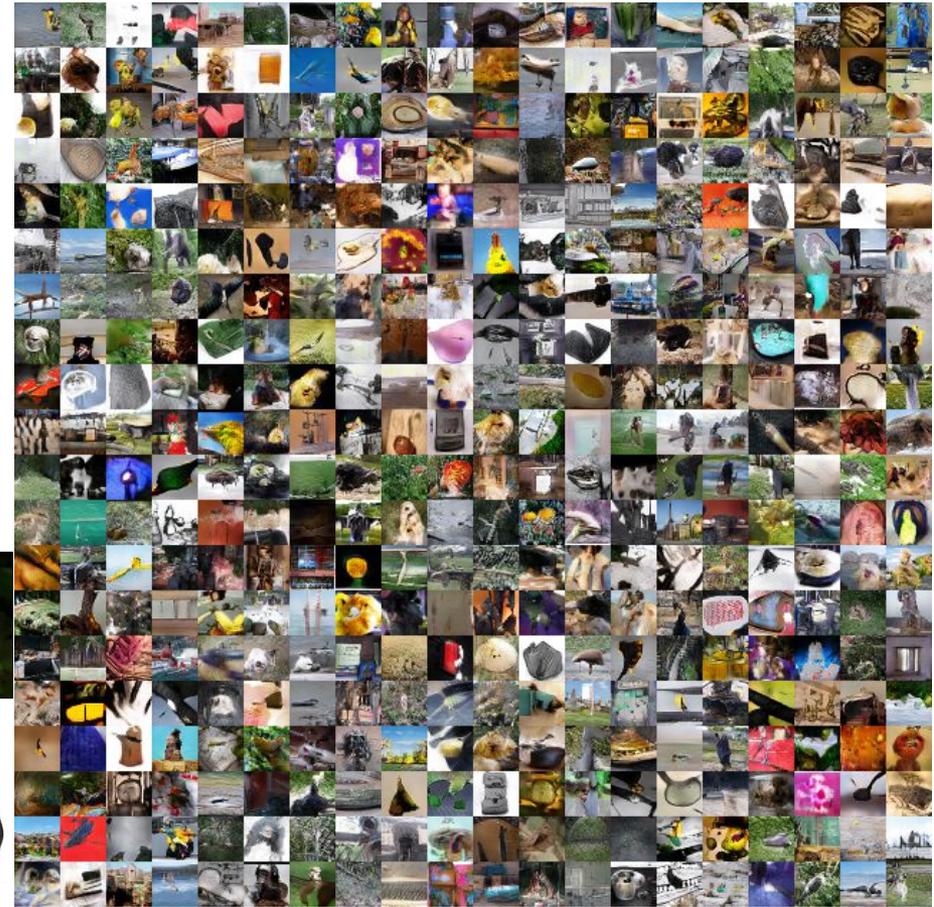
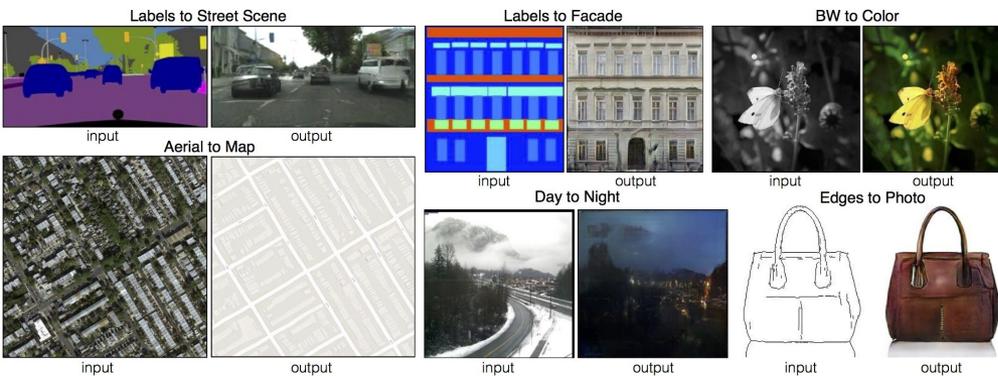
# Deep Generative Models Seminar

Azade Farshad

Preliminary Meeting, 31.01.2019  
Summer Semester 2019

# What are generative models?

More than pretty images...  
... And a bunch of math



Implementation: <https://github.com/phillipi/pix2pix>

Image source:  
[https://github.com/Newmu/dcgan\\_code](https://github.com/Newmu/dcgan_code)



# Overview

Main idea: Evolution of deep generative models

Main focus:

- VAE – GANs
- adversarial learning
- adversarial attacks

Plan

- Wednesdays, 16:00-18:00
- Introductory lecture : by Dr. Gustavo Carneiro
- Student presentations and discussion



# Seminar Overview

Every participant will work on one paper and will be advised by one tutor

Number of papers: 12-14 papers

Number of tutors: 2 papers per tutor

Team: Prof. Nassir Navab, Dr. Gustavo Carneiro, Azade Farshad,  
Helisa Dharmo, Magda Paschali, Oliver Scheel, Leslie Casas, Ashkan  
Khakzar, Mahdi Saleh, Artem Savkin



# Prerequisites

Highly recommended background on

- Neural networks
- Linear algebra
- Calculus
- Statistics

Registration: TUM Matching

Motivation letter: Welcomed



# Presentation Structure

The presentations will share the same structure to help connecting and comparing the presented papers.

## Structure

- Motivation / Problem definition
- Related work and connection to previously presented papers
- Method
- Performance
- Discussion w.r.t previously presented papers

Mandatory presentation in all sessions.

Active participation is important for a good grade.



# Report Structure

The report will share the same structure to help connecting and comparing the presented papers.

Structure (2 - 8 pages)

- Motivation / Problem definition
- Related work
- Method
- Performance
- Personal opinion



# Questions!

