# TAMING OUR FUTURE AI OVERLORDS



Lakeside Hackfest, 24/25 Aug 2018

## HI, I AM CLAUS



blog.x5ff.xyz

- Rust
- Machine learning
- Writing about practical things

# WHAT YOU ARE GOING TO LEARN

- 1. Data Science & Ethics
- 2. Classic Machine Learning
- 3. Deep Learning With Keras
- 4. APIs

#### GOAL

Give you an overview and directions where to go for more.

#### SET UP OPTIONS

#### LOCAL (USB)

- 1. Copy files and requirements/folder to disk
- 2.\$ pip install -r
   requirements/requirements.txt --no index --find-links requirements

#### SET UP OPTIONS

#### ONLINE

 Go to notebooks.azure.com and setup from github.com/celaus/computer.vision.101 (risky)

## MEANWHILE ...

... TALK ABOUT ETHICS

#### STATISTICAL BIAS

Statistical bias is a systematic tendency in the process of data collection, which results in lopsided, misleading results.

This can occur in any of a number of ways, in the way the sample is selected, or in the way data are collected.

Wikipedia

#### PROBLEM SELECTION

Select the business problem first

- For whom is this a problem?
- What's the benefit?
- Is the solution ethical?

#### DATA SELECTION

- Do you have sufficient data?
- Does the data reflect the real world?
- Test & Validation data sets!

#### MODEL SELECTION

- Impact of false positives?
- Absolute numbers of failures?

#### LET'S START!

\$ jupyter notebook

localhost:8888

## HELP!

#### COMMERCIAL SOFTWARE ENGINEERING

Short engagements to solve your novel business problems, for free

Ask your account manager



#### AZURE TOOLS

- Model management
- Databases
- GPU VMs
- Tools (DataBricks,)
- Deployment (AKS, AppService, VSTS)
- Cognitive Services

ML Tools on Azure



### THANK YOU



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QUESTIONS? FEEDBACK?

