

# **Artificial Intelligence/ Machine Learning**

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Beri Kohen

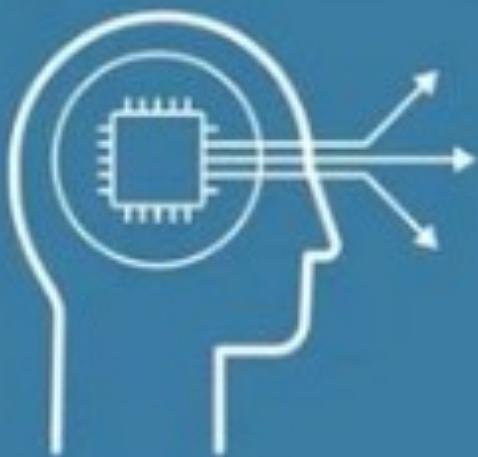


# Hakkımda

- BS in Mathematical and Computational Science  
at Stanford University, MS in Data Science
- SHYFT Power Solutions, Hepsiburada, Uber
- Stanford Machine Learning Group
- CS 229: Machine Learning, Teaching Assistant



# AI vs. ML



## ARTIFICIAL INTELLIGENCE

ENGINEERING OF MACHINES  
THAT MIMIC COGNITIVE FUNCTIONS

VS



## MACHINE LEARNING

ABILITY TO PERFORM TASKS  
WITHOUT EXPLICIT INSTRUCTIONS  
AND RELYING ON PATTERNS

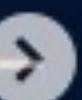


# History of ML

1952

1980-2000

2000s



Arthur Samuel:  
computer  
program learns  
to play checkers

Algorithms for  
big data

Deep learning  
takeoff

?



## Supervised Learning

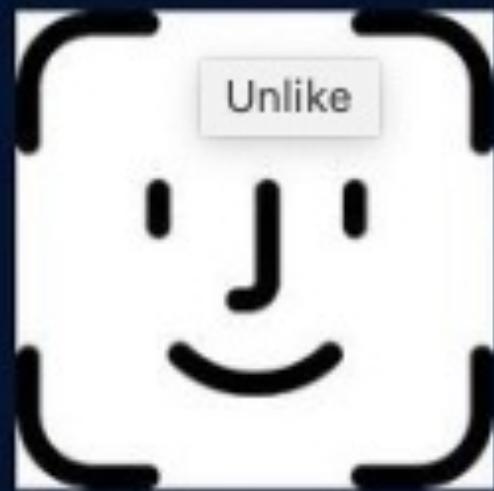
Google

cs 229

cs229 stanford

cs229 notes

cs 229 problem sets



ARDA ÇAĞ

## Reinforcement Learning



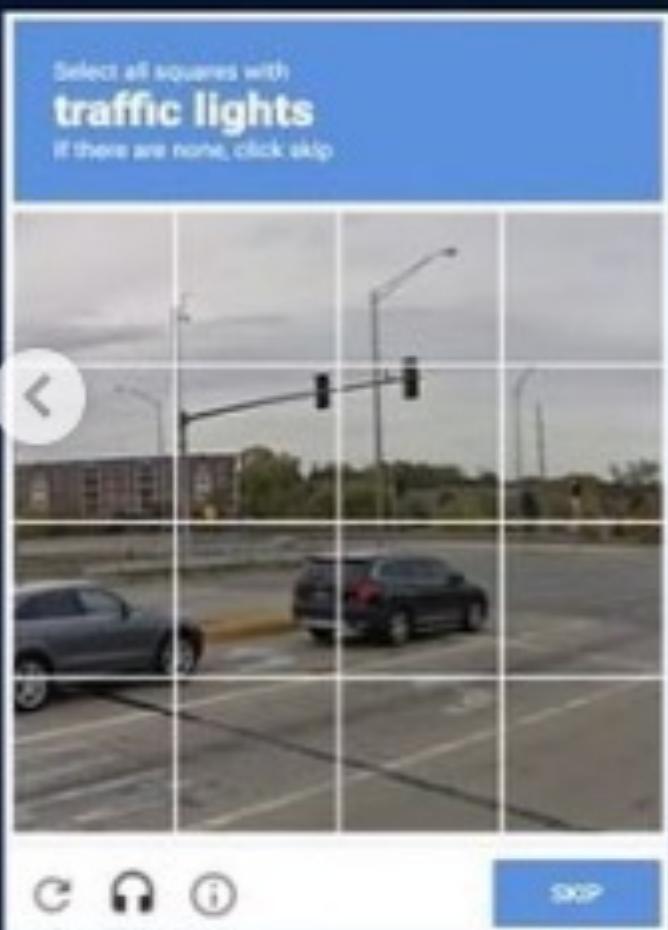
ZEYNEP S

ELİF MAVİ

Arda Deniz

RESUL TA

# Data Collection



Rule 1: Include all visible part and draw as tightly as possible.



CORRECT



WRONG: must be as tight as possible!



WRONG: must include all visible parts!



CORRECT



WRONG: excluded parts do not matter as long as all visible parts are included.

Source: cs.stanford.edu

Stanford ML Group

- NAIP imagery does not always provide a very recent capture of a location (see NAIP Status Maps). Results could differ with other imagery sources.
  - The locations of detections are restricted to the coverage of NAIP, which only captures the continental U.S.
  - The locations are not always centered on the facility.
  - The storage tank counts are not always exact.

Check out the interactive map below, containing oil refineries detected by OGNet!

The radius of the circles is proportional to the number of storage tanks at each facility.

