# AI, Big Data, and Opensource

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# What is AI?

Artificial Intelligence describes the ability to imitate cognitice functions typically associated with the human mind. "it's whatever hasn't been done yet"
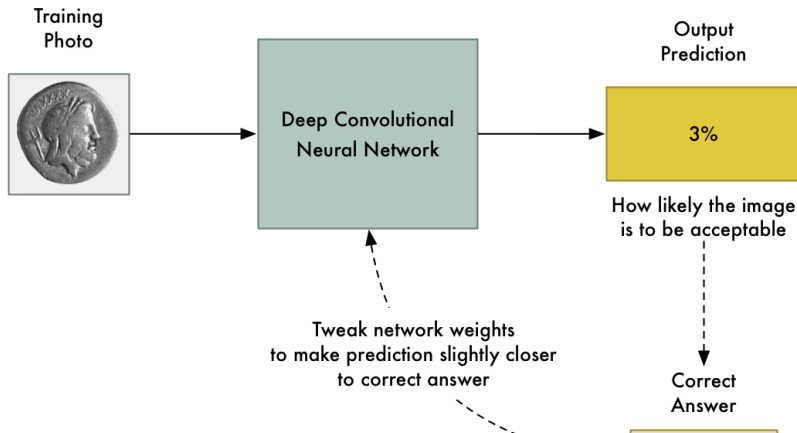
# To be more specific. . .

Machine Learning: a computer can learn to perform certain tasks
without a specific program for said task Learning
requires experience, so this type of computation
requires massive amounts of data

# Examples of ML applications

- Amazon reccommendation engine
- computer vision for self-driving vehicles (ex. Tesla)
- thiscatdoesnotexist.com

# Training a neural network

Training the Neural Network

# Big Data

- the very nature of big data outmatches the capabilities of traditional databases
- collection of this data has been necessary with the centralization of data and the rise of modern internet services, as well as the decrease in hardware specifications
- This data collection now serves as a barrier to product development in the field

## ML and FLOSS

- Amazon released Neo-AI project under Apache Software License
- TensorFlow by Google also under Apache Licensing

# Big Data and FLOSS?

- privacy and data
- ethics of data collection (opt in vs opt out)
- Cambridge Analytica
- Tesla's AI in development powered by sensors on roads

# Not all data collection is evil: Don't let privacy scandals stall cybersecurity

Facebook continues to be criticized for its data collection practices. The media is hammering Google over how it handles data. JPMorgan Chase & Company was vilified for using Palantir software to allegedly invade the privacy of employees. This past June marked the five-year anniversary of The Guardian's first story about NSA mass surveillance operations.

These incidents and many others have led to an era where the world is more heavily focused on privacy and trust. We've seen this reflected in several ways. Europeans have enacted the GDPR. Some global businesses have voluntarily halted certain data sales practices. Many Americans have left Facebook since its privacy scandal erupted. California passed its own version of a consumer privacy

# Conclusions?

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