

AI for Everyone

week1
what's AI

Machine learning vs. data science

Machine learning

“Field of study that gives computers the ability to learn without being explicitly programmed.”

software

-Arthur Samuel (1959)

Data science

Science of extracting knowledge and insights from data.

slide deck

week2
Building AI projects

AI technical tools

Machine learning frameworks:

- TensorFlow
- PyTorch
- Keras
- MXNet
- CNTK
- Caffe
- PaddlePaddle
- Scikit-learn
- R
- Weka

Research publications:

- Arxiv

week3
Building AI in your company

Example roles

- **Software Engineer**
 - E.g., joke execution, ensure self-driving reliability, ...
 - **Machine Learning Engineer**
 $A \rightarrow B$
 - **Machine Learning Researcher**
 - Extend state-of-the-art in ML
- } Applied ML Scientist

Example roles

- **Data Scientist**
 - Examine data and provide insights
 - Make presentation to team/executive
- **Data Engineer**
 - Organize data
 - Make sure data is saved in an easily accessible, secure and cost effective way

1 MB (megabyte)
1,000 MB = GB (gigabyte)
1,000,000 MB = TB (terabyte)
1,000,000,000 MB = PB (petabyte)

AI Transformation Playbook

1. Execute pilot projects to gain momentum
2. Build an in-house AI team
3. Provide broad AI training
4. Develop an AI strategy
5. Develop internal and external communications

week4

AI and society