Hands-On Machine Learning

With Scikit-Learn, Keras & TensorFlow

경희대학교 컴퓨터공학과
2019102191 신주영

경희대학교
KYUNG HEE UNIVERSITY

Author, Transferred tooth

- Author
- Aurelien Geron
  - Machine Learning Consultant
  - Google YouTube Video Classification team leader
  - Wifirst CTO
  - Polyconseil CTO

- Transferred tooth
- 박해선
  - 홍익대학교 기계공학과
  - 방송통신대학교 컴퓨터과학과
  - 방송통신대학원 정보과학과

경희대학교
KYUNG HEE UNIVERSITY

Contents

part 1. Machine Learning

경희대학교
KYUNG HEE UNIVERSITY

Contents

part 2. Neural Network and Deep Learning

경희대학교
KYUNG HEE UNIVERSITY

Framework

- Scikit-Learn: It is easy to use and many machine learning algorithms are efficiently implemented. It's great to use when learning machine learning for the first time.
- Keras: It is a high-level deep learning API. It is very easy to build, train, and execute neural networks.
- TensorFlow: It is a very complex library for calculating variance figures. By distributing computations on GPU servers, large neural networks can be effectively trained and executed.

경희대학교
KYUNG HEE UNIVERSITY

Necessary skills

- You need to already know Numpy, Pandas, Matplotlib
- You also need to know calculus, linear algebra, probability, statistics
- We’re going to use IDE as a Jupyter Notebook

경희대학교
KYUNG HEE UNIVERSITY

Other materials

- Scikit-learn lecture: https://homl.info/ngcourse
- Scikit-learn user guide: https://homl.info/skdoc
- Dataquest: https://www.Dataquest.io/
- Quora: https://homl.info/1
- Deep Learning web site: http://deeplearning.net
- Machine Learning Competition Website: https://www.Kaggle.com

경희대학교
KYUNG HEE UNIVERSITY

Sample code

- https://github.com/rickiepark/handson-ml2
- https://nbviewer.jupyter.org/github/rickiepark/handson-ml2/tree/master

경희대학교
KYUNG HEE UNIVERSITY