

# MACHINE / DEEP LEARNING

with TensorFlow (Python)

**BASIC**

Sung Kim <hunkim+ml@gmail.com>  
<http://hunkim.github.io/ml>

**NAVER** | Clova





ALPHAGO  
01:58:30

LEE SEDOL  
01:59:41

Mind  
Match

	AlphaGo	Lee Sedol
		



We have superpowers

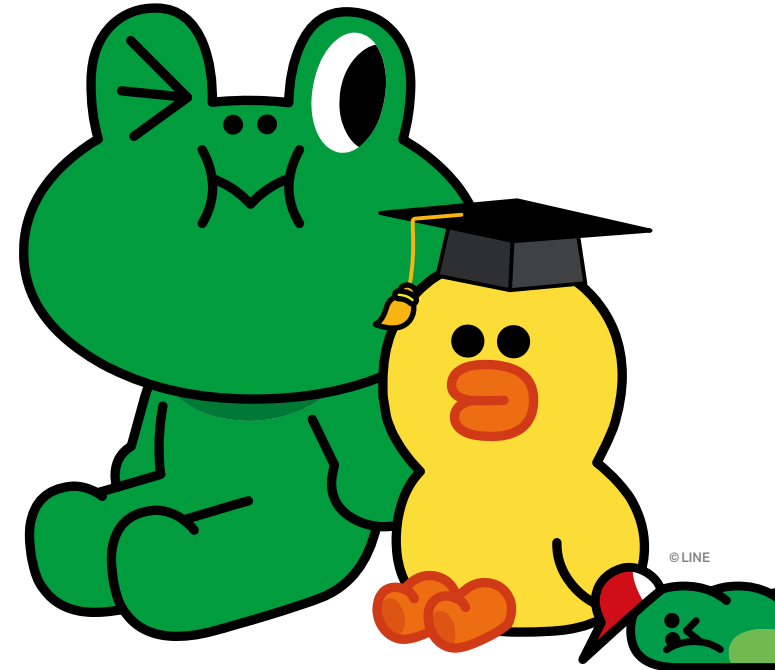


Baidu Research

Andrew Ng

# Audience

01. Want to Understand Basic Machine Learning (ML)
02. No/Weak Math/Computer Science Background
  - $y = Wx + b$  ( $y = ax + b$ )
03. Want to Use ML as Black-box with Basic Understanding
04. Want to Use Tensorflow and Python (Optional)



# Goals

01. Basic Understanding of Machine Learning Algorithm
  - Linear regression, Logistic regression (classification)
  - Neural networks, Convolutional Neural Network, Recurrent Neural Network
02. Solve Your Problems Using Machine Learning Tools
  - Tensorflow and Python

# Course Structure

- About 10min Lecture
- Programming Tutorial Using Tensorflow

# Acknowledgement

## 01. Acknowledgement

- <https://class.coursera.org/ml-003/lecture>
- [http://www.holehouse.org/mlclass\(note\)](http://www.holehouse.org/mlclass(note))

## 02. Convolutional Neural Networks for Visual Recognition

- <http://cs231n.github.io>

## 03. TensorFlow

- <https://www.tensorflow.org>
- <https://github.com/aymericdamien/TensorFlow-Examples>

# Schedule

01. Machine Learning Basic Concepts
02. Linear Regression
03. Logistic Regression (Classification)
04. Multivariable (Vector) Linear/Logistic Regression
05. Neural Networks
06. Deep Learning
  - CNN
  - RNN
  - Bidirectional Neural Networks



**NEXT LECTURE**

# **ML BASIC CONCEPTS**