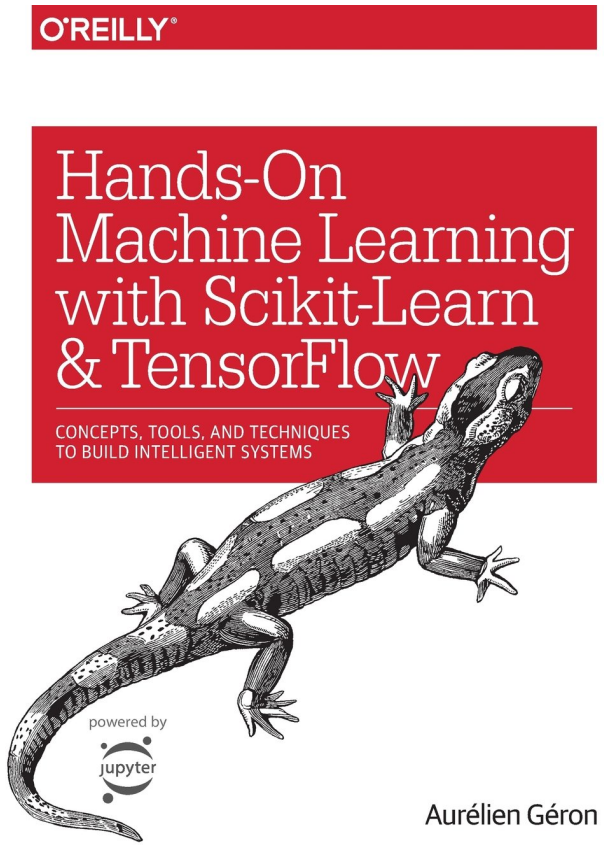
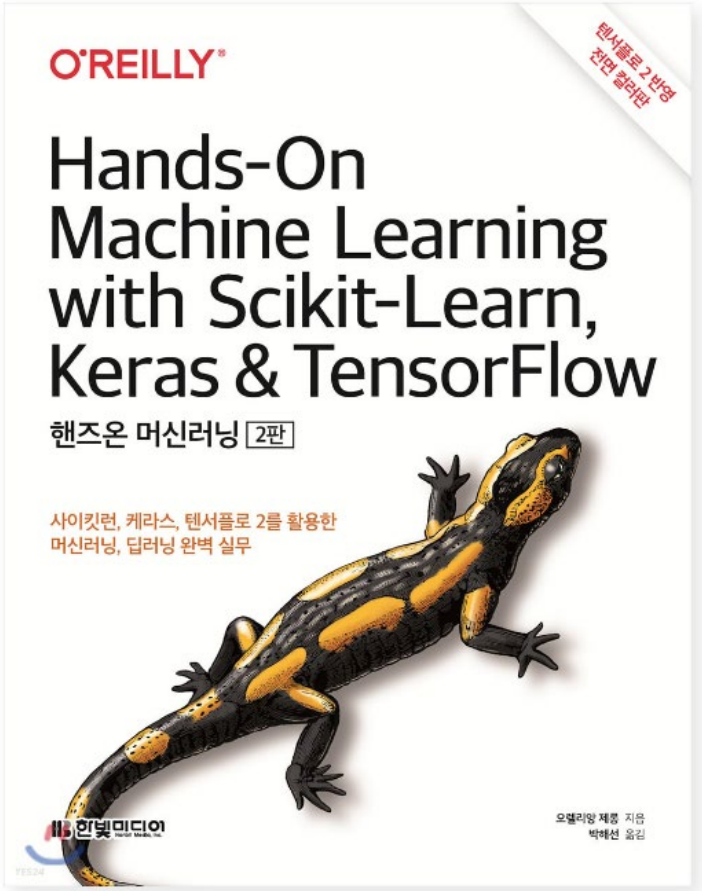
MACHINE LEARNING

MACHINE LEARNING STUDY 2022 WINTER

TEXTBOOK





Optional

PROCESS

Session 0

Introduce

- STUDY GOALS
- STUDY KEYPOINTS

Plan & Details

- STUDY DETAILS
- WEEKLY TASKS
- STUDY PLANS

QnA & Team Building

- TEAM BUILDING
- FIX TOPIC
- Q&A & NETWORKING TIME

INTRODUCE

STUDY GOALS

BASIC

MACHINE LEARNING STUDY 2022 WINTER

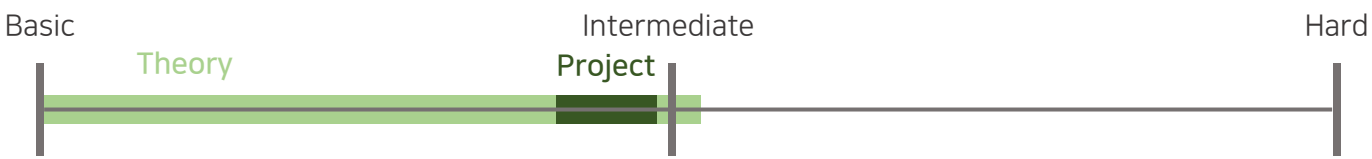
Machine Learning Basics and Utilization Study

Learn about the basic algorithms of Machine Learning

Acquire implementation capability based on theory or formula

Learning quickly through project experience with understood Machine Learning algorithms

Overall Level



INTRODUCE

STUDY KEYPOINTS

GROUP STUDY

Group-based
Projects and Presentations

TERM PROJECT

Toy projects using
ML algorithms

WEEKLY MEETING

Weekly meeting on
Every Tuesday 6:00 PM

PLAN

WEEKLY TASKS

PERSONAL TASK

Submit Preliminary research about topic of the next presentation

GROUP TASK

Term Project

Prepare a presentation slide

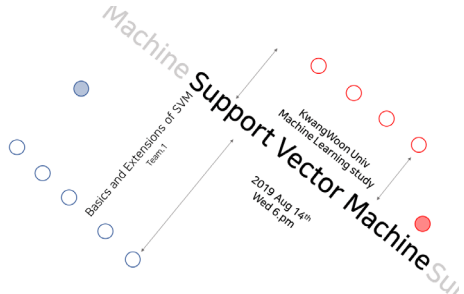
※ Presentations should be written in English

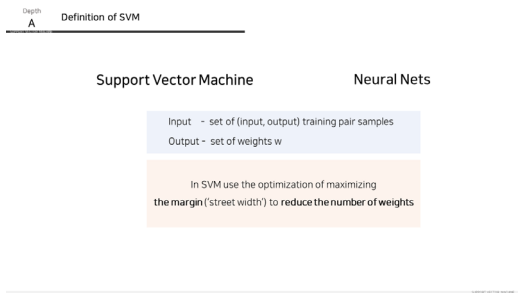
※ Presenter will be assigned randomly

'Warning' to all team member
If presentation is not prepared
3 warnings == expulsion

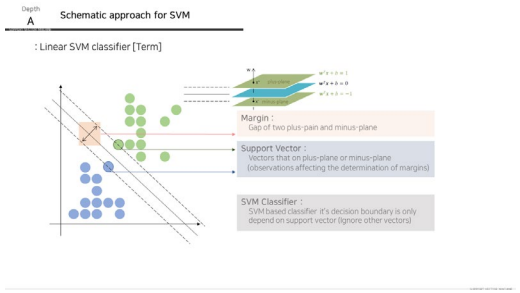
EXAMPLE

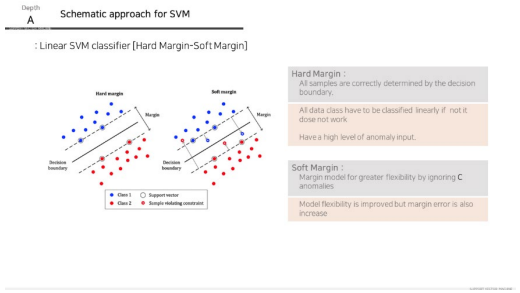
Section PPT





< Intro >





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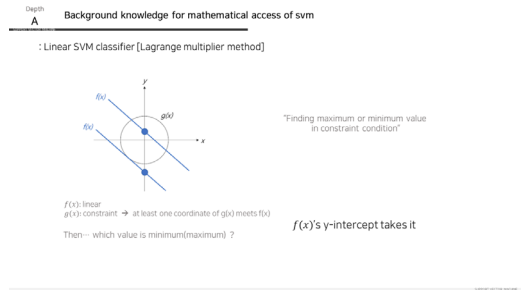

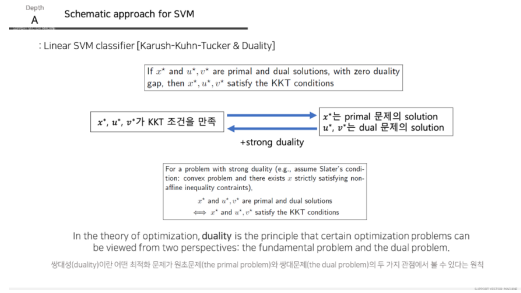

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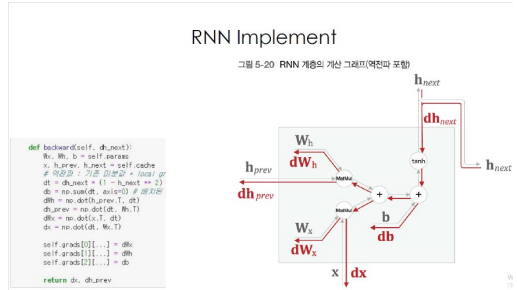
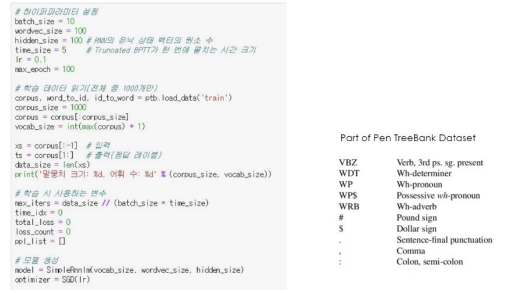
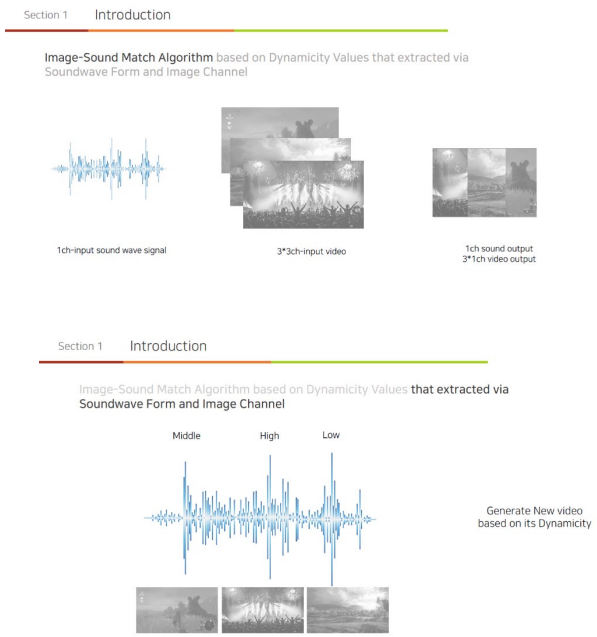




< Implement >

EXAMPLE

Progress PPT & Weekly Assignment



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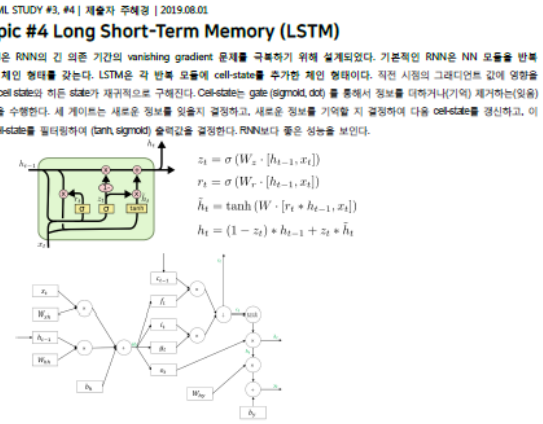


<Preliminary research>

PLAN

STUDY PLANS

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3 Meetup #0	4	5	6	7
8	9	10 Meetup #1	11	12	13	14
15	16	17 Meetup #2	18	19	20	21
22	23	24	25	26	27	28
29	30	31 Meetup #3	1	2	3	4

Jan

Meetup #0

→ Introduce Study
→ Team-Building & Set Topic

Meetup #1

→ Basic of Machine Learning (1)
→ Topic Presentation #1 – Basic Probability Theorems and Metrics for ML

Meetup #2

→ Basic of Machine Learning (2)
→ Topic Presentation #2 → k-means and k-Nearest Neighbor algorithm
→ Pre-conference: Project presentation

Meetup #3

→ Topic Presentation #3 — Linear Regression and Logistic Regression
→ Project Progress sharing (1/3)

PLAN

STUDY PLANS

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31 Meetup #3	1	2	3	4
5	6	7 Meetup #4	8	9	10	11
12	13	14 Meetup #5	15	16	17	18
19	20	21 Meetup #6	22	23	24	25
26	27	28	9	10	11	12

Feb

Meetup#4

→ Topic Presentation #4 – Decision Tree and Random Forest
→ Project Progress sharing (2/3)

Meetup#5

→ Topic Presentation #5 – Dimensionality Reduction
→ Project Progress sharing (3/3)

Meetup#6

→ Final Project Presentation

Team-Building

TOPICS

List of Topic

- Topic Presentation #1 - Basic Probability Theorems and Metrics for ML
- Topic Presentation #2 - K-means and K-Nearest Neighbors
- Topic Presentation #3 - Linear Regression and Logistic Regression
- Topic Presentation #4 - Decision Tree and Random Forest
- Topic Presentation #5 - Dimensionality Reduction

TOPIC	TOPIC 1	TOPIC 2	TOPIC 3	TOPIC 4	TOPIC 5
Team	Jiwoon	B, F	C, D	A, G	E

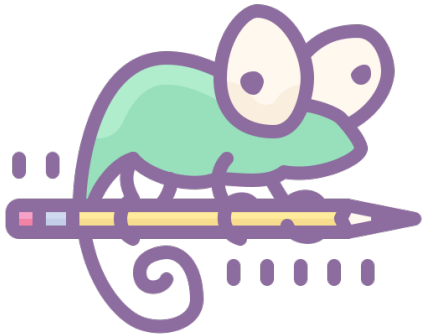
Team-Building

Team Build

TEAM A	김민지	정현기	윤태호	양지석
TEAM B	이지홍	정성현	오민성	
TEAM C	이정훈	김효민	김준혁	
TEAM D	김기수	황정원	류한웅	
TEAM E	심재윤	이혜미	박정원	장우현
Team F	졸업작품팀1			
Team G	졸업작품팀2			

TOPIC	TOPIC 1	TOPIC 2	TOPIC 3	TOPIC 4	TOPIC 5
Team	Jiwoon	B, F	C, D	A, G	E

Q&A



Jiwoon Lee(이지운)

Email. metr0jw@outlook.com

Phone. +82-10-3326-2914

Kwangwoon University

School of Computer Information and Engineering

Member of BCML Lab.