

Main Content 2

1. Deep Learning Interpretation	733
a. Neural Network Interpretation	735
b. Deep Learning Interpretation	883
2. Improvement of Deep Learning	927
a. Speed-Up with GPU	929
i. What is GPU?	931
ii. How GPU Accelerate DL?	933
iii. Welcome to Colab	946
1. Getting Started with Colab	947
2. Upload Notebook from Local Drive	951
3. Import Data to Colab	956
iv. Train Model with GPU on Colab	961
b. Imbalance Class	971
i. Problem with Imbalance Class	973
ii. Solution	984
iii. Code	990
c. Regularization	1007
i. L2 Regularization	1012
ii. L1 Regularization	1021
iii. Elastic Net	1029
iv. Dropout Regularization	1038
1. What is Dropout Regularization	1039
2. Effect of Dropout	1041
3. Technical of Dropout	1044
4. Code of Dropout	1069
d. Optimizer	1075
i. Gradient Descent Variants	1077
1. Batch Gradient Descent	1078
2. Stochastic Gradient Descent	1084
3. Minibatch Gradient Descent	1090
ii. Optimization Algorithm	1105
1. Momentum Base	1106
2. Adaptive Learning Rate Base Algorithm	1117
a. Adagrad	1118
b. RMSprop	1132

3. Adam	1148
4. Conclusion	1169
iii. Code	1174
3. Advanced Workshop	1181
a. Supervised Learning Workflow	1182
b. Workshop Overview	1183
c. Supported Library	1185
d. Code Pipeline	1194
e. Ai in Real Estate Business	1200
i. Abstract	1201
ii. Why this project important?	1202
iii. Who this project is for?	1203
iv. House Price Dataset	1204
v. What we learn from this project?	1206
vi. File	1208
f. AI in Diagnosing Alzheimer's	1212
i. Abstract	1213
ii. Why this project important?	1214
iii. Who this project is for?	1215
iv. Alzheimer Dataset	1216
v. What we learn from this project?	1218
vi. File	1225
g. AI in Speech Recognition	1229
i. Abstract	1230
ii. Why this project important?	1231
iii. Who this project is for?	1232
iv. Voice Command Dataset	1233
v. What we learn from this project?	1235
vi. File	1244