

# Neural Network and Deep Learning

Neural Network .....	3
What is Neural Network? .....	4
Why we need Neural Network?.....	10
Real World Application.....	15
Architecture of Neural Network .....	20
Component of Neural Network.....	34
Hidden Node.....	36
Hidden Layer .....	38
Weight & Bias.....	40
Activation Function.....	49
How Neural Network Work .....	83
Deep Learning.....	129
What is Deep Learning?.....	130
Architecture of Deep Learning.....	134
Component of Deep Learning .....	151
Hidden Node.....	153
Hidden Layer .....	155
Weight & Bias.....	157
Activation Function.....	171
Why we need Deep Learning? .....	175
How Deep Learning Work .....	185
Deep Learning for Regression.....	240
Model Creation.....	243
Assumption.....	245
Real Face of the Model .....	247

Cost Function and Cost Landscape .....	260
How to Create Model (Math) .....	285
How to Create Model (Code) .....	294
Prediction.....	308
1-Sample .....	314
Multi-Sample.....	324
Deep Learning for Classification .....	340
Binary Classification.....	341
Data.....	344
Model Creation.....	349
Prediction.....	395
Multi-Class Classification .....	428
Data.....	431
Model Creation.....	436
Prediction.....	483
Workshop.....	519
Car Price.....	520
AI in Skin Cancer .....	534