**CONCEPTS AND FUNDAMENTALS (ARTIFICIAL INTELLIGENCE)**

**(A-Z w/PYTORCH)**

1. 2d Activation Map
2. Artificial Intelligence
3. Activation Function
4. Affine Transformation
5. Affine Transformations and Non-Linearities`
6. Auto Encoder
7. Back propagation
8. Batch Normalization
9. Batches
10. Benefits of Employing CNNs
11. Bias
12. Catastrophic Forgetting
13. Classification
14. Convolution Layer
15. Convolutional Operation
16. Cost Function
17. CUDA
18. Data augmentation
19. Data Augmentation and its Techniques
20. Data Preprocessing
21. Data Sampling
22. Decoder
23. Deep Supervised Learning
24. Detection
25. Drop Weight
26. Dropout
27. Embeddings
28. Embeddings
29. Encoder
30. Epochs
31. Evaluation
32. Evaluation Metrics
33. Exploding and Vanishing Gradient Problem
34. Feature Extraction
35. Feature Matching
36. Filters
37. Forward Propagation
38. Fully Connected Layer
39. GANs
40. GPU/CPU Base Deep Learning Approach
41. Gradients
42. Gradient Descent
43. Hyper Parameter Tuning
44. Image classification and regression
45. Imbalanced Data
46. Intelligence
47. Interpretability of Data
48. Kernel Definition
49. Learning Rate and Learning Rate Annealing
50. Localization
51. Loss Functions
52. Mini Batch
53. Model Compression
54. Model Fitting
55. Model Inference
56. Model Selection
57. Momentum
58. Neural Network
59. Neuron
60. Non-Linear Activation Layer
61. Optimizer Selection
62. Output Classes
63. Output, Hidden & Input
64. Overfiting, Balanced and Undefitting
65. Padding
66. Parameters and activations
67. Pooling Layer(Avg &Max)
68. Pose Optimization
69. Pretrained Models: AlexNet, VGG, GoogleLeNet, ResNetV2,DenseNet
70. Random initialization and transfer learning
71. Recurrent Neural Network
72. Recurrent neural networks (RNNs)
73. Recurrent Neuron
74. Regularization
75. ReLU & Leaky ReLU
76. ResNet and DenseNet architectures
77. Segmentation
78. Segmentation
79. SGD, Momentum, Adam, and other optimizers
80. Sigmoid
81. Softmax
82. Stochastic Gradient Descent
83. Tanh
84. Target Selection
85. The Concept of Artificial Intelligence
86. The Concept of Deep Learning
87. The Concept of Machine Learning
88. Training, Validation and Test Data
89. Transfer Learning
90. Uncertainity Scaling
91. Underspecification
92. Weigh Decay
93. Weight
94. Weight decay