Mindluster Platform

About the course Neural network optimization techniques

Course Presenter : TutorialsPoint

Neural network optimization, in this course we will learn about the Neural Network Optimization techniques essential for improving model performance and training efficiency. Starting with foundational concepts, we explore optimization algorithms like Gradient Descent, Stochastic Gradient Descent (SGD), and advanced methods such as Adam, RMSProp, and AdaGrad. Youâ€™ll discover how learning rate schedulers enhance convergence, including step decay and exponential decay strategies. The course covers essential techniques like Regularization (L1, L2, and Dropout) to prevent overfitting, Batch Normalization to stabilize training, and Early Stopping to avoid unnecessary computations. Additionally, weâ€™ll dive into Hyperparameter Tuning, Weight Initialization methods, and Data Augmentation for robust model training. By the end, youâ€™ll master the tools and strategies needed to optimize neural networks effectively for real-world applications. TutorialsPoint

Computer Science Category's Courses

Course Lesson(6)

Lesson 1 : **Optimization Techniques in Neural Networks Neural Network for Machine Learning**

Lesson 2 :
Types of Activation Functions in Neural Network Artificial Intelligence Machine Learning

Lesson 3 : **Activation Function in Neural Networks Machine Learning**

Lesson 4 : **Cost Function in Neural Networks Neural Networks for Machine Learning**

Lesson 5 : **How Neural Network Works Neural Networks in Machine Learning**

Lesson 6 : **What is a Neural Network Neural Networks for Machine Learning Simply Explained**

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business@mindluster.com