KOENIG SOLUTIONS · COURSE OUTLINE

Deep NN Tuning: Dropout, Optimizers & TensorFlow

Learn to tune deep neural networks with initialization, regularization, optimization algorithms and TensorFlow.

COURSE OVERVIEW

This course covers practical aspects of deep learning, including initialization methods, L2 regularization and dropout to avoid overfitting, and gradient checking to identify errors in models. It then addresses optimization algorithms such as advanced optimizations, random mini batching, and learning rate decay scheduling to speed up model training. Finally, it explores hyperparameter tuning, batch normalization, and programming frameworks, with a focus on TensorFlow for building and training neural networks on datasets.

WHO THIS COURSE IS FOR

- **Deep Learning Engineers**
- **Machine Learning Engineers**
- **Data Scientists**
- **AI Developers**

COURSE SYLLABUS

3 Modules

01

Practical Aspects of Deep Learning

Discover and experiment with a variety of different initialization methods, apply L2 regularization and dropout to avoid model overfitting, then apply gradient checking to identify errors in a fraud detection model.

02

Optimization Algorithms

Develop your deep learning toolbox by adding more advanced optimizations, random mini batching, and learning rate decay scheduling to speed up your models.

03

Hyperparameter Tuning, Batch Normalization, and Programming Frameworks

Explore Tensor Flow, a deep learning framework that allows you to build neural networks quickly and easily, then train a neural network on a Tensor Flow dataset.

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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