KOENIG
step forward

KOENIG SOLUTIONS · COURSE OUTLINE

Deep Learning: RNN & LSTM in Python

Learn to build recurrent neural networks and LSTM models in Python for sequence-based deep learning tasks.

COURSE OVERVIEW

This course covers neural network fundamentals before introducing recurrent neural networks, explaining why they are needed and how they function. It examines the four types of recurrent neural networks, including one to one, one to many, many to one and many to many architectures. The course then addresses the vanishing gradient problem and its solutions, leading into Long Short-Term Memory networks, their workings and a use case implementation.

WHO THIS COURSE IS FOR

Data Scientists | **Machine Learning Engineers** | **Python Developers** | **AI Researchers** | **Deep Learning Practitioners**

LEARNING OBJECTIVES

- Explain what a neural network is and identify popular types
- Describe why recurrent neural networks are needed
- Explain how a recurrent neural network works
- Compare the four types of recurrent neural networks
- Analyse the vanishing gradient problem and its solutions
- Explain the workings of Long Short-Term Memory networks
- Implement a use case using LSTM

COURSE SYLLABUS

15 Topics

TOPICS

- What is a Neural Network?
- Popular Neural Network
- Why do we need a Recurrent Neural Network?
- What is a Recurrent Neural Network?
- How does a Recurrent Neural Network work?
- Long Short Term Memory (LSTM)
- Use case implementation of LSTM

TYPES OF RECURRENT NEURAL NETWORKS: THERE ARE FOUR TYPES OF RECURRENT NEURAL NETWORKS

- One to One
- One to Many
- Many to One
- Many to Many
- Vanishing Gradient Problem
- Gradient Problem Solutions
- Long Short-Term Memory Networks
- Workings of LSTMs

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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