KOENIG
step forward

KOENIG SOLUTIONS · COURSE OUTLINE

AI in Banking: Machine Learning, NLP & Chatbots

Learn to apply machine learning, data analytics, NLP and chatbot techniques to banking use cases.

5 Days	5	30
DURATION	MODULES	TOPICS

COURSE OVERVIEW

This course covers the foundations of artificial intelligence and machine learning, including typical applications, system architecture and tools such as Python, R and WEKA. It then moves through data analytics and visualization, covering data gathering, feature engineering, statistical analysis and dimensionality reduction. Unsupervised and supervised learning methods are introduced, including clustering, association rules, recommender systems, K-Nearest Neighbors, Decision Trees, Naive Bayes and Artificial Neural Networks. The course concludes with natural language processing techniques and the construction of a chatbot, covering text classification, information extraction, question answering, natural language understanding and generation, and building a working system.

WHO THIS COURSE IS FOR

- **Data Scientists**
- **Machine Learning Engineers**
- **NLP Engineers**
- **Banking Analysts**
- **Software Developers**
- **AI Practitioners**

LEARNING OBJECTIVES

- Explain artificial intelligence and machine learning concepts
- Identify software tools such as Python, R and WEKA
- Apply data gathering, feature engineering and dimensionality reduction
- Analyse data using statistical analysis and visualization techniques
- Apply clustering, association rules and recommender systems
- Compare classifiers such as K-Nearest Neighbors and Decision Trees
- Apply natural language processing techniques for text classification
- Build a chatbot using natural language understanding and generation

COURSE SYLLABUS

5 Modules, 30 Topics

DAY 1

01

Artificial Intelligence Basics

TOPICS

Artificial Intelligence and Machine Learning · Typical applications · The architecture of a system · Software tools: Python · Software tools: R · Software tools: WEKA

DAY 2

02

Data Analytics and Visualization

TOPICS

Data gathering · Feature engineering · Statistical analysis · Data visualization · Dimensionality reduction

DAY 3

03

Unsupervised and Supervised Learning

TOPICS

Similarity estimation · Clustering · Association rules · Recommender systems · K-Nearest Neighbors · Decision Trees · Naïve Bayes · Artificial Neural Networks

DAY 4

04

Natural Language Processing

TOPICS

Extracting structure from raw text · Regular expressions · Word features and semantics · Text classification · Information extraction · Question answering systems

DAY 5

05

Building a Chatbot

TOPICS

Extracting information from conversations · Chatbot as a search engine · Natural Language Understanding · Natural Language Generation · Building a system

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

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