

European IT Certification Curriculum Self-Learning Preparatory Materials

EITC/AI/ADL Advanced Deep Learning



This document constitutes European IT Certification curriculum self-learning preparatory material for the EITC/AI/ADL Advanced Deep Learning programme.

This self-learning preparatory material covers requirements of the corresponding EITC certification programme examination. It is intended to facilitate certification programme's participant learning and preparation towards the EITC/AI/ADL Advanced Deep Learning programme examination. The knowledge contained within the material is sufficient to pass the corresponding EITC certification examination in regard to relevant curriculum parts. The document specifies the knowledge and skills that participants of the EITC/AI/ADL Advanced Deep Learning certification programme should have in order to attain the corresponding EITC certificate.

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EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: INTRODUCTION TOPIC: INTRODUCTION TO ADVANCED MACHINE LEARNING APPROACHES





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS **LESSON: NEURAL NETWORKS**

TOPIC: NEURAL NETWORKS FOUNDATIONS





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: ADVANCED COMPUTER VISION TOPIC: CONVOLUTIONAL NEURAL NETWORKS FOR IMAGE RECOGNITION





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: ADVANCED COMPUTER VISION TOPIC: ADVANCED MODELS FOR COMPUTER VISION





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: OPTIMIZATION

TOPIC: OPTIMIZATION FOR MACHINE LEARNING



EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: RECURRENT NEURAL NETWORKS TOPIC: SEQUENCES AND RECURRENT NETWORKS





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: NATURAL LANGUAGE PROCESSING TOPIC: ADVANCED DEEP LEARNING FOR NATURAL LANGUAGE PROCESSING





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: ATTENTION AND MEMORY TOPIC: ATTENTION AND MEMORY IN DEEP LEARNING





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: GENERATIVE ADVERSARIAL NETWORKS TOPIC: ADVANCES IN GENERATIVE ADVERSARIAL NETWORKS





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: UNSUPERVISED LEARNING TOPIC: UNSUPERVISED REPRESENTATION LEARNING





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: ADVANCED GENERATIVE MODELS TOPIC: MODERN LATENT VARIABLE MODELS





EITC/AI/ADL ADVANCED DEEP LEARNING DIDACTIC MATERIALS LESSON: RESPONSIBLE INNOVATION TOPIC: RESPONSIBLE INNOVATION AND ARTIFICIAL INTELLIGENCE

