



# CERTIFICATE

## Danial Amin

Has successfully completed test requirements of  
The European Information Technologies Certification Programme

### EITC/AI/DLTF Deep Learning with TensorFlow

**Certification Programme examination result:**



80%

**Certification Programme description:**

Introduction: introduction to deep learning with neural networks and TensorFlow; TensorFlow: installing TensorFlow, TensorFlow basics, neural network model, running the network, processing data, preprocessing continued, training and testing on data, using more data, installing the GPU version of TensorFlow for making use of a CUDA GPU, installing CPU and GPU TensorFlow on Windows; Recurrent neural networks in TensorFlow: recurrent neural networks (RNN), RNN example in TensorFlow; Convolutional neural networks in TensorFlow: convolutional neural networks basics, convolutional neural networks with TensorFlow; TensorFlow Deep Learning Library: TFLearn; Training a neural network to play a game with TensorFlow and Open AI: introduction, training data, training model, testing network; Using convolutional neural network to identify dogs vs cats: introduction and preprocessing, building the network, training the network, using the network; 3D convolutional neural network with Kaggle lung cancer detection competition: introduction, reading files, visualizing, resizing data, preprocessing data, running the network; Deep learning in the browser with TensorFlow.js: introduction, basic TensorFlow.js web application, AI Pong in TensorFlow.js, training model in Python and loading into TensorFlow.js; Creating a chatbot with deep learning, Python, and TensorFlow: introduction, data structure, buffering dataset, determining insert, building database, database to training data, training a model, NMT concepts and parameters, interacting with the chatbot

**Certificate Programme version/revision:** EITC/AI/DLTFv1r1

**Earned ECTS credits:** 2



**CERTIFICATE ID:** EITC/AI/DLTF/SLJ24004790

To validate authenticity of this certificate or review its  
programme and test results scan/click QR code or visit:  
[www.eitci.org/validate](http://www.eitci.org/validate)



**DATE OF ISSUE:**  
August 2024  
Brussels, Belgium  
European Union