



6 Courses

Machine Learning with Python

Scalable Machine Learning on  
Big Data using Apache Spark

Introduction to Deep Learning &  
Neural Networks with Keras

Deep Neural Networks with  
PyTorch

Building Deep Learning Models  
with TensorFlow

AI Capstone Project with Deep  
Learning



06/18/2020

**Ahmad Abdelrahman**

has successfully completed the online, non-credit Professional  
Certificate

## IBM AI Engineering

Learners who have completed this 6 course Professional Certificate have a practical understanding of Machine Learning (ML) & Deep Learning (DL). They have technical skills to start a career in AI Engineering, and can:

- Implement ML algorithms including Classification, Regression, Clustering, and Dimensional Reduction using scipy & scikitlearn
- Perform ML on Big Data and deploy ML Algorithms and Pipelines on Apache Spark
- Demonstrate understanding of Deep Learning models such as autoencoders, restricted Boltzmann machines, convolutional networks, recursive neural networks, and recurrent networks
- Build deep learning models and neural networks using Keras, PyTorch and Tensorflow libraries
- Demonstrate ability to present and communicate outcomes of deep learning projects

Romeo Kienzler  
Chief Data Scientist  
IBM Watson IoT

Joseph Santarcangelo  
Senior Data Scientist  
IBM

Alex Aklson, Ph.D.  
Data Scientist

Saeed Aghabozorgi  
Sr. Data Scientist  
IBM

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.