



5 Courses

Neural Networks and Deep Learning

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

Structuring Machine Learning Projects

Convolutional Neural Networks

Sequence Models



Jul 15, 2020

Muhammad Ali Sadiq

has successfully completed the online, non-credit Specialization

Deep Learning

Congratulations! You have completed all 5 courses of the Deep Learning Specialization. In this Specialization, you built neural network architectures such as Convolutional Neural Networks, Recurrent Neural Networks, LSTMs, Transformers, and learned how to make them better with strategies such as Dropout, BatchNorm, and Xavier/He initialization. You mastered these theoretical concepts, learned their industry applications using Python and TensorFlow, and tackled real-world cases such as speech recognition, music synthesis, chatbots, machine translation, natural language processing, and more. You are now familiar with the capabilities and challenges of deep learning. You are ready to take the definitive step in the world of AI and participate in the development of leading-edge technology.

Andrew Ng,
Founder,
DeepLearning.AI

Kian Katanforoosh
Co-founder, Workera

Younes Bensouda
Mourri
Instructor of AI,
Stanford University

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.

Verify this certificate at:
coursera.org/verify/specialization/2R8PJTD6FFJT



4 Courses

What is Data Science?

Tools for Data Science

Data Science Methodology

Databases and SQL for Data
Science with Python



Jul 23, 2020

Muhammad Ali Sadiq

has successfully completed the online, non-credit Specialization

Introduction to Data Science

In this Specialization learners developed foundational Data Science skills to prepare them for a career or further learning that involves more advanced topics in Data Science. The specialization entailed understanding what is Data Science is and the various kinds of activities that a Data Scientist's perform. It familiarized learners with various open source tools, like Jupyter notebooks, used by Data Scientists. It taught them about methodology involved in tackling data science problems. The specialization also provided knowledge of relational database concepts and the use of SQL to query databases. Learners completed hands-on labs and projects to apply their newly acquired skills and knowledge.

Rav Ahuja
AI & Data Science
Program Director
IBM Skills Network

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Verify this certificate at:
coursera.org/verify/specialization/Z4NE9A5WCWYY



May 8, 2020

Muhammad Ali Sadiq

has successfully completed

Tools for Data Science

an online non-credit course authorized by IBM and offered through Coursera

Three handwritten signatures in black ink, stacked vertically. The first signature is "Maureen McElaney", the second is "Romeo Kienzler", and the third is "Svetlana Levitan".

Maureen McElaney
Romeo Kienzler
Svetlana Levitan

COURSE
CERTIFICATE



Verify at coursera.org/verify/Z4HLTPRTLJ7X

Coursera has confirmed the identity of this individual and their
participation in the course.



Aug 6, 2020

Muhammad Ali Sadiq

has successfully completed

Introduction to TensorFlow for Artificial
Intelligence, Machine Learning, and Deep Learning

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A stylized, handwritten signature in blue ink that reads 'Laurence Moroney'.

Laurence Moroney
Lead AI Advocate, Google

COURSE
CERTIFICATE



Verify at coursera.org/verify/YTGL2UXVL2UQ

Coursera has confirmed the identity of this individual and their
participation in the course.



Jun 17, 2020

Muhammad Ali Sadiq

has successfully completed

Python for Data Science, AI & Development

an online non-credit course authorized by IBM and offered through Coursera

A handwritten signature in black ink, reading "Joseph Santarcangelo".

Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE
CERTIFICATE



Verify at coursera.org/verify/WD2PRPL6BLNL

Coursera has confirmed the identity of this individual and their
participation in the course.



Jul 23, 2020

Muhammad Ali Sadiq

has successfully completed

Databases and SQL for Data Science with Python

an online non-credit course authorized by IBM and offered through Coursera

A handwritten signature in black ink, appearing to read "Rav Ahuja".

Rav Ahuja
Global Program Director,
Skills Network

A handwritten signature in black ink, appearing to read "Hima".

Hima Vasudevan
IBM

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/NXWK6R4ZM8LY

Coursera has confirmed the identity of this individual and their
participation in the course.



Jun 23, 2020

Muhammad Ali Sadiq

has successfully completed

**Improving Deep Neural Networks: Hyperparameter
Tuning, Regularization and Optimization**

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng, Founder, DeepLearning.AI & Co-founder, Coursera
Kian Katanforoosh, Co-founder, Workera
Younes Bensouda Mourri, Instructor of AI, Stanford University

**COURSE
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Coursera has confirmed the identity of this individual and their
participation in the course.



Jun 1, 2020

Muhammad Ali Sadiq

has successfully completed

Data Science Methodology

an online non-credit course authorized by IBM and offered through Coursera

A handwritten signature in black ink, appearing to read "Alex Akson".

Alex Akson, Ph.D.
Data Scientist

A handwritten signature in black ink, appearing to read "Polong Lin".

Polong Lin
Data Scientist, IBM

COURSE
CERTIFICATE



Verify at coursera.org/verify/L3U79Q4WHMWF

Coursera has confirmed the identity of this individual and their participation in the course.



Jun 24, 2020

Muhammad Ali Sadiq

has successfully completed

Structuring Machine Learning Projects

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng, Founder, DeepLearning.AI & Co-founder, Coursera
Kian Katanforoosh, Co-founder, Workera
Younes Bensouda Mourri, Instructor of AI, Stanford University

COURSE
CERTIFICATE



Verify at coursera.org/verify/JKDB59HKNTRV

Coursera has confirmed the identity of this individual and their participation in the course.



Jul 15, 2020

Muhammad Ali Sadiq

has successfully completed

Sequence Models

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng, Founder, DeepLearning.AI
Kian Katanforoosh, Co-founder, Workera
Younes Bensouda Mourri, Instructor of AI, Stanford University

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/F397TS9ER56j

Coursera has confirmed the identity of this individual and their participation in the course.



Jun 13, 2020

Muhammad Ali Sadiq

has successfully completed

Neural Networks and Deep Learning

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng, Founder, DeepLearning.AI & Co-founder, Coursera
Kian Katanforoosh, Co-founder, Workera
Younes Bensouda Mourri, Instructor of AI, Stanford University

COURSE
CERTIFICATE



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Coursera has confirmed the identity of this individual and their participation in the course.



Jul 2, 2020

Muhammad Ali Sadiq

has successfully completed

Convolutional Neural Networks

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng, Founder, DeepLearning.AI & Co-founder, Coursera
Kian Katanforoosh, Co-founder, Workera
Younes Bensouda Mourri, Instructor of AI, Stanford University

COURSE
CERTIFICATE



Verify at coursera.org/verify/S9K622CZCLKH

Coursera has confirmed the identity of this individual and their participation in the course.



May 8, 2020

Muhammad Ali Sadiq

has successfully completed

Front-End Web Development with React

an online non-credit course authorized by The Hong Kong University of Science and Technology and offered through Coursera

A handwritten signature in black ink, reading "J. K. Muppala", with a horizontal line underneath.

Jogesh K. Muppala
Associate Professor, Department of Computer Science and Engineering
The Hong Kong University of Science and Technology

COURSE CERTIFICATE



Verify at coursera.org/verify/SWB6FEV3DME9

Coursera has confirmed the identity of this individual and their participation in the course.



May 1, 2020

Muhammad Ali Sadiq

has successfully completed

Front-End Web UI Frameworks and Tools: Bootstrap 4

an online non-credit course authorized by The Hong Kong University of Science and Technology and offered through Coursera

A handwritten signature in black ink, reading "J. K. Muppala", with a horizontal line underneath.

Jogesh K. Muppala
Associate Professor, Department of Computer Science and Engineering
The Hong Kong University of Science and Technology

COURSE CERTIFICATE



Verify at coursera.org/verify/YQ7KQUR2TV7Q

Coursera has confirmed the identity of this individual and their participation in the course.

Microsoft Certified

Data Analyst Associate

MUHAMMAD ALI SADIQ

Has successfully completed the requirements to be recognized as a Microsoft Certified: Data Analyst Associate.

Date of achievement: March 31, 2021

Valid until: March 31, 2023

A handwritten signature in black ink, appearing to read "N. Satya Nadella".

Satya Nadella
Chief Executive Officer

