



Certificate no: UC-e776e922-efde-45f3-8134-fb08b9348706

Certificate url: ude.my/UC-e776e922-efde-45f3-8134-fb08b9348706

Reference Number: 0004

CERTIFICATE OF COMPLETION

Apache Kafka Series - KSQL on ksqlDB for Stream Processing !

Instructors **Stephane Maarek | AWS Certified Cloud Practitioner, Solutions Architect, Developer, Simon Aubury, Conduktor
Kafkadeemy**

Zafar Mahmood

Date **July 7, 2023**

Length **4 total hours**



Certificate no: UC-bd7cbb86-6102-4d0f-ba20-1469dc77ad18

Certificate url: ude.my/UC-bd7cbb86-6102-4d0f-ba20-1469dc77ad18

Reference Number: 0004

CERTIFICATE OF COMPLETION

Docker & Kubernetes: The Practical Guide [2023 Edition]

Instructors **Academind by Maximilian Schwarzmüller, Maximilian Schwarzmüller**

Zafar Mahmood

Date **Dec. 13, 2022**

Length **23.5 total hours**



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



Mar 9, 2019

Zafar Mahmood

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:
<https://coursera.org/verify/specialization/K3WVKR9BFCY4>

Certificate of Completion

Zafar Mahmood

Amazon Web Services: Data Services

Updated: 07/2017 • Completed: 07/2017 • 4h 31m

Certificate No: 6A78F5242F5D4503944F064F278C356D



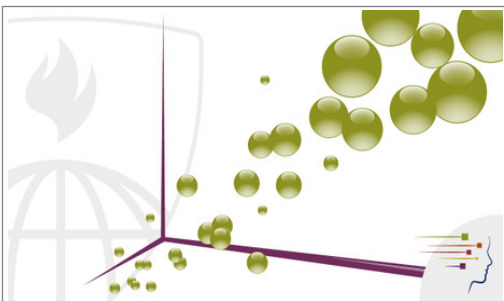
JUNE 04, 2015

Statement of Accomplishment

WITH DISTINCTION

ZAFAR MAHMOOD

HAS SUCCESSFULLY COMPLETED THE JOHNS HOPKINS UNIVERSITY'S OFFERING OF



Exploratory Data Analysis

Covers exploratory data summarization techniques that are applied before modeling to inform development of complex models. Topics include plotting in R, principles of constructing graphics, and common multivariate techniques used for high-dimensional data visualization.

A handwritten signature in black ink, likely belonging to Roger D. Peng.

ROGER D. PENG, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

A handwritten signature in black ink, likely belonging to Jeffrey Leek.

JEFFREY LEEK, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

A handwritten signature in black ink, likely belonging to Brian Caffo.

BRIAN CAFFO, PHD, MS
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

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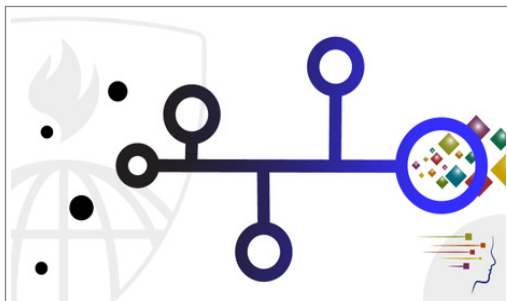
MAY 11, 2015

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Getting and Cleaning Data

This course covers obtaining data from the web, APIs, databases, and colleagues in various formats, as well as the basics of cleaning and “tidying” data. It also covers the components of a complete data set: raw data, processing instructions, codebooks, & processed data.

JEFFREY LEEK, PHD
DEPARTMENT OF BIOSTATISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

ROGER D. PENG, PHD
DEPARTMENT OF BIOSTATISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

BRIAN CAFFO, PHD, MS
DEPARTMENT OF BIOSTATISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

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APRIL 04, 2015

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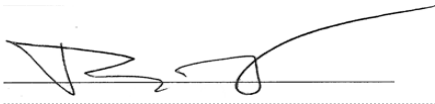
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R Programming

This course covers how to use & program in R for effective data analysis. It covers practical issues in statistical computing: programming in R, reading data into R, accessing R packages, writing R functions, debugging, profiling R code, & organizing and commenting R code.



ROGER D. PENG, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH



JEFFREY LEEK, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH



BRIAN CAFFO, PHD, MS
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

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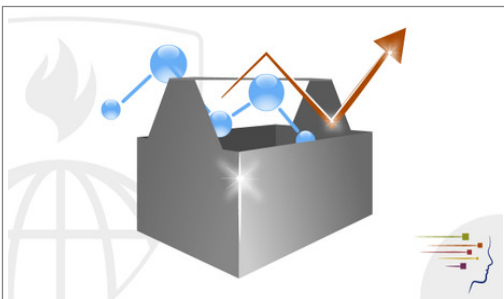
MARCH 08, 2015

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The Data Scientist's Toolbox

Overview of the data, questions, & tools that data analysts & scientists work with. It is a conceptual introduction to the ideas behind turning data into knowledge as well as a practical introduction to tools like version control, markdown, git, GitHub, R, and RStudio.

JEFFREY LEEK, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

ROGER D. PENG, PHD
DEPARTMENT OF BIostatISTICS, JOHNS HOPKINS
BLOOMBERG SCHOOL OF PUBLIC HEALTH

BRIAN CAFFO, PHD, MS
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BLOOMBERG SCHOOL OF PUBLIC HEALTH

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