



04/21/2020

Павел Новиков

has successfully completed

Scalable Machine Learning on Big Data using
Apache Spark

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

A handwritten signature in black ink, appearing to read 'R. Kienzler'.

Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

COURSE
CERTIFICATE



Verify at coursera.org/verify/VWEUSMYPKP7Y

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