



Jan 31, 2024

**Liyuan Liu**

has successfully completed

**Advanced Machine Learning and Signal Processing**

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

Romeo Kienzler  
Chief Data Scientist  
IBM Watson IoT

Nikolay Manchev  
Senior Data Scientist  
IBM EMEA Data Science (2015-2019)

**COURSE  
CERTIFICATE**



Verify at:  
<https://coursera.org/verify/KDPZLK57Q7KK>

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