



Dec 2, 2024

# Charles Bushman

has successfully completed

## Machine Learning with Apache Spark

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

COURSE  
CERTIFICATE



Rav Ahuja  
Global Program Director  
IBM Skills Network

Ramesh Sannareddy  
Data Engineering Subject Matter Expert  
Skill-up Technologies

Verify at:  
<https://coursera.org/verify/QDM07OLK7M74>  
Coursera has confirmed the identity of this individual and  
their participation in the course.