ID VERIFIED

CERTIFICATE of ACHIEVEMENT

edX Berkeley



Anthony D. Joseph

Professor in Electrical Engineering and Computer Science
University of California, Berkeley
Technical Advisor
Databricks

This is to certify that

Murugan Manickam

successfully completed and received a passing grade in

CS100.1x: Introduction to Big Data with Apache Spark

a course of study offered by BerkeleyX, an online learning initiative of The University of California, Berkeley through edX.

VERIFIED CERTIFICATE
Issued July 10, 2015

Verify the authenticity of this certificate at
https://verify.edx.org/cert/9060dc6dc3074571a50a28d0b9490598