

Berkeley

arthr D Jul
Anthony D. Joseph

Professor in Electrical Engineering and Computer Science

University of California, Berkeley

Oiana Mo

Executive Director,
Berkeley Resource Center for Online Education
University of California, Berkeley

This is to certify that

James Coen

successfully completed and received a passing grade in

CS110x: Big Data Analysis with Apache Spark

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



VALID CERTIFICATE ID b141635cd23b4253a67e6f2f6810a5df