CERTIFICATE of ACHIEVEMENT



Anthony D. Joseph

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

Technical Advisor
Databricks



Ameet Talwalkar

Assistant Professor of Computer Science
University of California, Los Angeles

Visiting Assistant Professor in Electrical Engineering and Computer Science
University of California, Berkeley

Technical Advisor
Databricks



Diana Wu

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

Berkeley

Murugan Manickam

successfully completed all courses in the XSeries

Big Data

a series of two courses offered by BerkeleyX through edX.

XSERIES CERTIFICATE
Issued August 12, 2015

Verify the authenticity of this certificate at
https://verify.edx.org/cert/e39315471fc04699847e7957f47bc40b