



May 5, 2021

Thomas Karsten

has successfully completed

Database Architecture, Scale, and NoSQL with
Elasticsearch

an online non-credit course authorized by University of Michigan and offered through
Coursera

A handwritten signature in black ink, appearing to read 'Charles', followed by a horizontal line.

Charles Severance
Clinical Professor, School of Information
University of Michigan

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