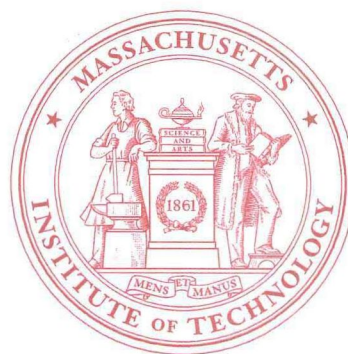




Massachusetts Institute of Technology

This is to certify that

Thomas Alois Popp



has successfully completed the

Architecture and Systems Engineering: Models and Methods to Manage Complex Systems

PROFESSIONAL CERTIFICATE PROGRAM

March 20, 2017 – August 7, 2017

(8.5 Continuing Education Units Awarded)

A handwritten signature in black ink, reading "Sanjay Sarma".

Sanjay Sarma
Vice President for Open Learning, MIT

A handwritten signature in black ink, reading "Bruce Cameron".

Bruce Cameron
Director, System Architecture Lab, MIT