

# Northwestern University

ON RECOMMENDATION OF THE FACULTY OF  
THE GRADUATE SCHOOL

NORTHWESTERN UNIVERSITY HAS CONFERRED THE DEGREE OF  
MASTER OF SCIENCE

UPON

EMRE KARAMAN

WHO HAS HONORABLY FULFILLED ALL THE REQUIREMENTS PRESCRIBED  
BY THE UNIVERSITY FOR THAT DEGREE

DONE AT EVANSTON ILLINOIS THIS THIRTY-FIRST DAY OF AUGUST IN THE  
YEAR TWO THOUSAND AND TWELVE A.D.

*Nathan A. Olson*

CHAIRMAN OF THE BOARD OF TRUSTEES

*Richard H. Dean*

SECRETARY OF THE BOARD OF TRUSTEES



*Arthur H. S. [Signature]*

PRESIDENT OF THE UNIVERSITY

*[Signature]*

DEAN