



Student ID Number: D00941008

National Taiwan University

*on the recommendation of the faculty of
the Graduate Institute of Photonics and Optoelectronics
College of Electrical Engineering and Computer Science
has conferred upon*

CHEN, YU-FAN

(陳昱帆)

the degree of Doctor of Philosophy

*together with all the honors, rights and privileges belonging to that degree. In witness whereof,
this diploma is issued with the University seal in the month of June, two thousand and eighteen.*

Tei-Wei Kuo

Acting President

Hung-Chi Kuo

Dean of Academic Affairs

MuCh

Dean, College of Electrical Engineering and Computer Science

J. B. Chen

Director of the Graduate Institute

國立臺灣大學