



**TRIBHUVAN UNIVERSITY  
INSTITUTE OF ENGINEERING  
PULCHOWK CAMPUS**

**THESIS NO: 071MSCS659**

**“DEEP SPIKING NEURAL NETWORK FOR MITOSIS DETECTION IN  
CANCER HISTOLOGY IMAGES”**

**By:**

**PITAMBAR JHA**

**SUBMITTED TO THE DEPARTMENT OF ELECTRONICS AND  
COMPUTER ENGINEERING IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN  
COMPUTER SYSTEM AND KNOWLEDGE ENGINEERING**

**DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING**

**NOV, 2018**

# **Deep Spiking Neural Network for Mitosis Detection in Cancer Histology Images**

By

Pitambar Jha

(071/MSCS/659)

Thesis Supervisor:

Associate Professor Dr. Dibakar Raj Pant

A thesis submitted in partial fulfillment of the requirement for the degree of Master of  
Science in Computer System and Knowledge Engineering

Department of Electronics and Computer Engineering

Institute of Engineering, Pulchowk Campus

Tribhuvan University

Lalitpur, Nepal

NOV, 2018