



## EDUCATION

### MASTER OF SCIENCE

Computer Science  
Tokyo Institute of Tech.  
2015 ▶ present

### BACHELOR OF ENG.

Computer Engineering  
Hanoi Uni. of Sci. & Tech.  
2009 ▶ 2014

## COURSES

### MACHINE LEARNING

Titech, Coursera

### COMPLEX NETWORK

Titech

### ALGORITHMS

Coursera

### DISCRETE GEOMETRY

Titech

### ADVANCED DATABASE

Titech

## LANGUAGES

### Python

5000+ lines

### Swift, Java SE, C++

2000+ lines

### Objective-C, Coq, Haskell

"Hello, World!"

## FRAMEWORKS

Theano, Keras

Tensorflow

NetworkX, SNAP.PY

## EXPERIENCE

### RESEARCH / Research assistant

#### MURATA LABORATORY

2015 ▶ present

URL: [Murata Laboratory Homepage](#)

My research focuses on neuronal machine learning models and complex networks. Currently, I am working on a motif-biased random walk model for graph latent representations learning. By using random walk as the negative samples generator and motif-biased random walk as positive samples generator, my model managed to outperform the latest models in graph labeling task by 5% in the worst case. My other activities include: Teaching assistant (Machine Learning, Complex Network), Fuji Xerox database project researcher, and horse racing "Keiba" betting competition.

#### ESRC LABORATORY

2012 ▶ 2015

LOCATION: Hanoi University of Science and Technology

I was responsible to lead an undergraduate team of 3 in a FPGA technology based project: 2-by-2 Mesh Network on Chip. In the early stage of the project, I designed and implemented a 2-by-2 Torus router to build prototype for the network. Later, I was in charge of the network interface module because it was the main bottle neck in the system. By splitting the buffer in half and using pipelining technique for simultaneous read/write, I managed to improve the throughput of the module by 40% compared to the original design.

### SOFTWARE DEVELOPMENT / Software engineering intern

#### DONUTS HANOI CO. LTD,

2015 ▶ 2015

URL: [Gachinko no Tora](#)

My responsibility is client-side mobile game development on Android. I worked with Cocos-2dx (C++) framework and LAMP server during my internship. I created a new game stage that appears when there is an event (Halloween, New Year, etc.) and improved the newsletter from plain text to multimedia by implementing linked list data structure.

## ACADEMIC ACTIVITIES

#### AAAI'17: "Motif-Aware Graph Embedding"

Hoang Nguyen, Shun Nukui, Tsuyoshi Murata  
*Submitted for review.*

REVIEWER: ICDM 2016.

#### NETSCI'16: Brain Network Presentation.

URL: [Netsci Brain Satellite](#)



## REWARDS

**2015:** Japanese Government  
Scholarship (MEXT).  
Master study, 2015-2017.

**2014:** Best thesis defense.  
2-by-2 Mesh NoC on FPGA.  
Supervised by Assoc. Prof. Nam  
Pham Ngoc.