# MICHELLE KIM

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#### **PROFILE**

Ph.D student with B.S. in Computer Science, studying Natural Language Processing

#### **EDUCATION**

Michigan State University, East Lansing, MI, USA

Sep. 2020 -

Ph.D in Computer Science and Engineering

Seoul National University, Seoul, Republic of Korea

Sep. 2017 - Jan. 2019

Completed 20 credits towards M.S./Ph.D in Computer Science and Engineering

Yonsei University, Seoul, Republic of Korea

Mar. 2015 - Aug. 2017

B.S. in Computer Science

University of Pennsylvania, Philadelphia, PA Completed 74 credits towards B.A in Mathematics Sep. 2009 - May 2013

PUBLICATIONS

1. Woojeong Jin, Dongjin Choi, <u>Youngjin Kim</u>, and U Kang, "Activity Prediction from Sensor Data using Convolutional Neural Networks and an Efficient Compression Method." Journal of KIISE (2018)

## **PROJECTS**

Building Lidar-Based Human Detection Technology Samsung Electronics Co., Ltd.

May 2018 - Sep. 2018 Seoul, Republic of Korea

- · Developed a Lidar-sensor environment for data acquisition.
- · Acquired and extracted data for the experiment, using a Lidar sensor.

# Building Energy Optimization Technology Samsung Electronics Co., Ltd.

Sep. 2017 - Apr. 2018

Seoul, Republic of Korea

- · Developed a model for activity prediction by improving Deep Residual Net.
- · Acquired and processed data for the experiment, using temperature, sound and video data.
- · Managed the project website that displayed activity prediction in real time.

#### Parallelization of Laminar-IR

Sep. 2016 - May 2017

Capstone project at Yonsei University

Seoul, Republic of Korea

· Implemented unfolding of stream graphs onto multicore platforms, using double buffering technique and barriers for synchronization.

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# Recommendation System for the Best-Fit Keyboard Layout Sep. 2016 - Dec. 2016

Class project at Yonsei University

Seoul, Republic of Korea

- · Implemented a deep learning model that recommends a mobile keyboard layout.
- · Acquired log file data of mobile users.

#### AWARDS AND HONORS

Samsung Lee Kun-Hee Scholarship, Daewon Foreign Language High School	2008
Michigan State University Fellowship	2020

#### TEACHING EXPERIENCE

## Teaching Assistant, Introduction to Data Mining

Spring 2018

Seoul National University

Seoul, Republic of Korea

· Taught students during office hours, and made assignments and tests.

Teaching Assistant, After-school computer science program Summer 2014 Geumok Elementary School Seoul, Republic of Korea

· Taught basic programming skills with Scratch, a programming software.

## Teaching Assistant, SAT academy

2009-2011

*IvyPlan* 

Seoul, Republic of Korea

· Taught SAT Reading, and managed TAs.

#### English Tutor, Voluntary program

2006-2007

Domestic violence shelter

Seoul, Republic of Korea

· Mentored students, and taught TOEIC and Korean-high-school-level English.

#### RELEVANT COURSEWORK

Discrete Mathematics		Fall 2015
Deep Learning		Fall 2017
Machine Learning		Fall 2017
Topics in Algorithms (Data Com	pression)	Spring 2018
Introduction to Computer Vision		Spring 2018
Natural Language Processing	Fall 2020 Numerical Linear Algebra	Sprint 2021

### TECHNICAL STRENGTHS

**Programming Languages** Python, C++, C, Java

Libraries TensorFlow (Advanced), NumPy, SciPy, Pandas

#### LANGUAGE SKILLS

**Advanced** Korean, English

Intermediate Spanish

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