MICHELLE KIM

E-mail: kimmic16@msu.edu, Homepage: cozymichelle.github.io

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, USA   Sep. 2009 - May 2013
Completed 74 credits towards B.A in Mathematics

PUBLICATIONS

1. <u>Michelle YoungJin Kim</u>, Junghwan Kim, Kristen Johnson "ABLE: Agency-BeLiefs Embedding to Address Stereotypical Bias through Awareness instead of Obliviousness," The 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)

2. <u>Michelle YoungJin Kim</u>, Junghwan Kim, Kristen Johnson, "Race, Gender, and Age Biases in Biomedical Masked Language Models," The 61st Annual Meeting of the Association for Computational Linguistics (ACL'23)

3. Junghwan Kim, <u>Michelle YoungJin Kim</u>, Barzan Mozafari, "Provable Memorization Capacity of Transformers," The Eleventh International Conference on Learning Representations (2023)

4. <u>Michelle YoungJin Kim</u>, Junghwan Kim, Bryan Woosung Kim, Kristen Johnson, Jee-In Kim, "AsdClaims: Twitter Dataset of Claims on Autism Spectrum Disorder," 1st International Workshop on Big Data Analytics for Health and Medicine (2022)

5. <u>Michelle YoungJin Kim</u>, Kristen Johnson, "CLoSE: Contrastive Learning of Subframe Embeddings for Political Bias Classification of News Media," The 29th International Conference on Computational Linguistics (COLING-2022)

6. 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)

EXPERIENCES

MedKit Korea May - Aug. 2021, May - Aug. 2022

Intern *Seoul, Republic of Korea*

· Led the collection of social media data on Autism Spectrum Disorder (ASD) via keyword search, curated dataset through filtering and labeling, and published results at IEEE BDA4HM Workshop
· Generated scenarios using language generation models for a digital therapy game, which was deployed in the app
· Collaborated with medical professionals to build a fact-checking model on ASD using machine learning algorithms

PROJECTS

Legal Judgement Prediction Aug. 2020 - Dec. 2020

Michigan State University Course Project *East Lansing, MI, USA*

· Proposed a novel perspective of utilizing summarization as a pre-processing step for legal judgment prediction
· Studied the taxonomy of legal cases and collected data for legal text summarization and judgment prediction

Building Lidar-Based Human Detection Technology May 2018 - Sep. 2018

Samsung Electronics Co., Ltd. *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 Sep. 2017 - Apr. 2018

Samsung Electronics Co., Ltd. *Seoul, Republic of Korea*

· Developed a model for predicting human indoor activities, which resulted in one published paper and one patent
· Experimented with multimodal data: video for motion detection and sensor for temperature and sound detection
· Managed the model repository and the website that displayed real-time predictions of the lab space activity

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

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

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

EXTRACURRICULAR ACTIVITIES

Graduate Women In Science Mid-Michigan Chapter	2024-2025
Engineering Graduate Leadership Fellows	2023-2024
CRA-WP Grad Cohort for Women	2022

TEACHING EXPERIENCE

Teaching Assistant, Introduction to Machine Learning Fall 2023 - Spring 2024
Michigan State University   *East Lansing, MI, USA*

- Taught and mentored students during office hours
- Assisted in the creation of assignments, test, and lecture segments

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

Numerical Linear Algebra	Spring 2021
Natural Language Processing	Fall 2020
Topics in Algorithms (Data Compression)	Spring 2018
Introduction to Computer Vision	Spring 2018

Deep Learning	Fall 2017
Machine Learning	Fall 2017
Discrete Mathematics	Fall 2015

Michelle Kim

TECHNICAL STRENGTHS

Programming Languages	Python, C++, C, Java
Libraries	PyTorch, TensorFlow, NumPy, SciPy, Pandas

LANGUAGE SKILLS

Advanced	Korean, English
Beginner	Spanish

Michelle Kim