# Do June Min

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Department of Electrical Engineering and Computer Science https://mindojune.github.io/

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# Education University of Michigan

2020 -

PhD Candidate in Computer Science

# University of Michigan

2020 - 2022

MS in Computer Science, GPA: 3.934

#### Swarthmore College

2012 - 2018

BSc, Computer Science & Mathematics, GPA: 3.86

#### Korean Minjok Leadership Academy

2009 - 2012

# Research Experience

Research at Language and Information Technologies, University of Michigan with Professor Rada Mihalcea, Dr Veronica Perez-Rosas 09/2019 -

Topic: Analyzing Patient-Nurse Conversations in a Comparative Effectiveness Study for Glycemia Reduction Approaches in Diabetes

Undergraduate Research at Swarthmore College

05/2017 - 08/2017

Topic: Cybersecurity game model with imperfect observation

# Better Generalization of Counselor Response Generation to Unseen Topics with Reinforcement Learning

Developed a policy gradient-based RL framework in conjunction with a custom-designed reward model for generating counselor reflections in the Motivational Interviewing (MI) framework

#### Research: Insights from Attacking Interpretable Models

Investigated Style Transfer and Input Thresholding as a means to make deep learning models more robust against adversarial attacks on images

## Research: Using NEAT + ES to Play Games

Approached the problem of playing "Flappy Bird" game via evolutionary strategy along with the neuroevolution of augmenting topologies method.

#### Development: Finite State Transducer for Korean in Apertium

Developed a tool for morphological analysis and generation, and Part-Of-Speech tagging of Korean

# Work Experience

# Amazon Alexa, Seattle

05/2022 - 08/2022

Applied Science Intern

Project: Adaptive Endpointing for Automatic Speech Transcription for Voice Assistants

## University of Michigan

09/2019 -

Research Assistant on NIH-funded project

Project: Analyzing Patient-Nurse Conversations in a Comparative Effectiveness Study for Glycemia Reduction Approaches in Diabetes

#### Samsung Research Center, Seoul

06/2016 - 08/2016

Intern, Smart Mobile Application Development Team

Project: Human Activity Recognition with Smartphones for SmartHome App

# Awards and

#### Surdna Foundation Fellowship

Fellowships Granted for Undergraduate Research, 2017

# Member of Sigma Xi, The Scientific Research Honor Society

Inducted for Research Work with Faculty Member, 2017

### Research Interests

Machine Learning, Natural Language Processing, Conversational Understanding &

Generation, Reinforcement Learning & NLP

#### **Publications**

- 1. Do June Min, Verónica Pérez-Rosas, Kenneth Resnicow, and Rada Mihalcea. PAIR: Promptaware margin ranking for counselor reflection scoring in motivational interviewing. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing*, 2022
- Do June Min, Verónica Pérez-Rosas, and Rada Mihalcea. Evaluating automatic speech recognition quality and its impact on counselor utterance coding. In Proceedings of the Seventh Workshop on Computational Linguistics and Clinical Psychology: Improving Access, 2021
- 3. Do June Min, Veronica Perez-Rosas, Shihchen Kuo, William H. Herman, and Rada Mihalcea. UPSTAGE: Unsupervised context augmentation for utterance classification in patient-provider communication. In *Proceedings of the 5th Machine Learning for Healthcare Conference*, 2020
- 4. Do June Min, Andreas Stolcke, Anirudh Raju, Colin Vaz, Di He, Venkatesh Ravichandran, and Viet Anh Trinh. Adaptive endpointing with deep contextual multi-armed bandits. Under review at 2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)

## Languages And Skills

- Languages: Korean (native), English (Proficient)
- Programming Languages: Python, C++, Java
- Machine Learning Framework: PyTorch, Tensorflow, Keras