Seung Hee Yang

Mobile Phone: +82-10-2746-2396
Email: sh_luv86@hotmail.com
Chosen Name: Kathy

EDUCATION

Seoul National University, Seoul, Korea
Ph.D. Candidate for Doctor of Engineering 2016 – Present
- Advisor: Professor Minhwa Chung

Seoul National University, Seoul, Korea
Master of Science in Engineering 2014 – 2016
- Advisor: Professor Minhwa Chung

RESEARCH INTERESTS

Spoken Language Processing
- Interdisciplinary Research in Linguistics and Machine Learning
- Speech Recognition
- Applications in Language Learning
- Speech and Language Biomedical Analytics for Healthcare

Artificial Intelligence
- Autonomous Robot Intelligence
- Cognitive Neural Intelligence

ACADEMIC ACTIVITIES

Research Project
- **Core technology development of spontaneous speech dialogue processing for language learning -** 언어학습을 위한 자유발화형 음성대화처리 원천기술 개발 (주관기관: ETRI), Ministry of Science and ICT 2015 – 2019
- **Intelligence Information Processing Software Core Technology Development -** 지능의 축적, 확장, 고정밀화를 위한 지능정보처리 SW 핵심기술 개발 및 고급인력양성 (주관기관: Information Technology Research Center (ITRC) 고려대학교 인공지능 연구센터), Ministry of Science and ICT, Korea 2016 – Present
- **Computer Assisted Pronunciation Training Software Development for Korean using Spoken Language Processing Technology National Research Foundation**, Ministry of Education, Korea 2016 – 2018

Teaching Assistant
- Speech and Language Processing, **Seoul National University** Spring 2016 – Fall 2018
- Speech Recognition Practice, **Seoul National University** Spring 2016 – Fall 2018

Talks
- Cognitive Science Colloquium, **Seoul National University** May, 2019

HONORS AND AWARDS

Sponsored Student for Outstanding PhD Thesis Candidate, Seoul National University 2019
Best Session Paper Award, Conference on Korea Information and Communications and Information Sciences (KICS) 2019
1st place, Creative Challenge, Conference on Human Computer Interaction (HCI), Seoul, Korea 2018
2nd place, Korea Robotics Engineering & Design Show (KROS), for Smart Pillow with Speech Recognition 2018
Scholarship for M.A. and Ph.D. degree, Seoul National University Spring 2015 – Fall 2018

PUBLICATIONS

[11] **Seung Hee Yang** (2019). Automatic Speech Recognition-enabled Language Learning System Development for Second Language Speakers of Korean. Doctoral Consortium, INTERSPEECH 2019, Graz, Austria.

[10] **Seung Hee Yang** & Minhwa Chung (2019). Self-imitating Feedback Generation Using GAN for Computer-Assisted Pronunciation Training. https://arxiv.org/abs/1904.09407. Proceedings of INTERSPEECH 2019, Graz, Austria.

[9] Taehyeong Kim, **Seung Hee Yang**, Hyunwoong Ko, Sungjae Cho, Jun-Young Lee, Byoung-Tak Zhang (2019). Emotion Recognition from Facial Expression Images Produced by Non-Actors. Real-World Recognition from Low-Quality Images and Videos (RLQ), Satellite workshop on International Conference on Computer Vision (ICCV), Seoul, Korea. (Extended Abstract).

[8] Taehyeong Kim, Minji Kwak, **Seung Hee Yang**, Jaeseo Lim, Byoung-Tak Zhang (2019). WithDorm: A Dormitory Solution for Linking Roomates, MobileHCI 2019, Taipei, Taiwan.

[7] **Seung Hee Yang** & Minhwa Chung (2018). Speech Assessment using Generative Adversarial Network. Proceedings of Machine Learning in Speech and Language Processing - Interspeech 2018 Satellite workshop, Hyderabad, India.

[6] **Seung Hee Yang**, Sangwoo Park, Taemyung Yang, Ilhyung Jin, Wooil Kim, Chingwei Liu, Seong-Woo Kim and Juhyun Eune (2018). Introducing Smart Pillow using Actuator Mechanism, Pressure Sensors, and Deep Learning-based ASR. ACM Augmented Human International Conference. Seoul, Korea.

[5] **Seung Hee Yang** & Minhwa Chung (2017). Correlation analysis of linguistic factors in non-native Korean speech and proficiency evaluation. Phonetics and Speech Sciences (Journal), 49-56.

[4] Crego, J., Kim, J., Klein, G., Rebollo, A., **Yang,** K., Senellart, J., ... & Enoue, S. (2016). Systran's pure neural machine translation systems. arXiv preprint arXiv:1610.05540.

[3] **Seung Hee Yang** & Minhwa Chung (2015). A Corpus-based Analysis of Korean Segments Produced by Chinese Learners. Proceedings of Asia-Pacific Signal and Information Processing Association (APSIPA), Hong Kong Polytechnic University, Hong Kong. 583-586.

[2] **Seung Hee Yang** & Minhwa Chung (2015). Automatic Classification of Retroflex Segmental Variations for Korean Produced by Chinese. Proceedings of International Conference on Speech Science (ICSS 2015), 105-106.

[1] **Seung Hee Yang**, Minsu Na & Minhwa Chung (2015). Modeling Pronunciation Variations for Non-native Speech Recognition of Korean Produced by Chinese Learners. Proceedings of SLaTE 2015 - Interspeech 2015 Satellite workshop on Speech and Language Technology in Education, Dresden, Germany, 95-99.

KOREAN PATENT

[1] **Seung Hee Yang** & Jae Chang Yang, "Method of Unsupervised Anomaly Detection for Driver Classification and Theft Detection," applied patent, June, 30, 2019.

SKILLS

Excellence in Kaldi Speech Recognition Toolkit
Fluency in Python Programming Language
Familiarity in C++
Native in English and Korean Languages (Spoken&Written)
Intermediate in French Language