Geonmin Kim

CONTACT	Computational NeuroSystem Lab., KAIST, 291 Daehak-ro, Yuseong-gu, Daejeon, South Korea	+82.10.9703.2947 ken.geonmin.kim@ gmail.com github: lifelongeek
RESEARCH INTERESTS	Dialogue systems, Speech recognition, Speech enhancement Neural network, Generative model	

EDUCATION	**Korea Advanced Institute of Science and Technology** Ph.D, Electrical Engineering, Advisor: Prof. Soo-Young Lee GPA: 3.93/4.3	Mar. 2013 – Oct. 2019 (expected)
	Korea Advanced Institute of Science and Technology B.S., Electrical Engineering Minor: Mathematical Science GPA: 3.97/4.3	Feb. 2008 – Aug. 2012

WORKING EXPERIENCE	**Sony Computer Entertainment America**, San Mateo, CA *Research Intern (mentor: Ruxin Chen)* Worked on multiple keyword spotting in speech	Oct. 2012 – Feb. 2013

RESEARCH PROJECTS	*Speech recognition* **Semi-supervised continuous speech recognition (2016)** **End-to-end continuous speech recognition (2015)** **Acoustic model for Korean syllable (2013-2014)** for *spontaneous spoken dialog system for language learning Electronics and Telecommunications Research Institute (ETRI)*	Aug. 2013 – Feb. 2017 leader
	Speech enhancement **Location-robust blind source extraction** for *free-running embedded speech recognition technology for natural language dialogue with robots Korea Evaluation Institute of Industrial Technology (KEIT),*	Sep - Nov. 2018 member
	Unpaired speech enhancement for *spontaneous spoken dialog system for language learning Electronics and Telecommunications Research Institute (ETRI)*	Apr - Oct. 2017 leader
	Natural language generation **Article based question-answering and chitchat bot** for *emotional intelligence technology to infer human emotion and carry on dialogue accordingly Institute for Information & Communication Technology Promotion (IITP)*	May – Nov. 2017 co-leader

PUBLICATION   International Journal

1. Bo-Kyeong Kim, **Geonmin Kim**, Soo-Young Lee, "Style-Controlled Synthesis of Clothing Segments for Fashion Image Manipulation", *IEEE transactions on multimedia*, (2019)

2. **Geonmin Kim**, Hwaran Lee, Bo-Kyeong Kim, Sang-Hoon Oh, Soo-Young Lee, "Unpaired Speech Enhancement by Acoustic and Adversarial Supervision for Speech Recognition", *IEEE Signal Processing Letters*, (2019)

3. Ho-Gyeong Kim, Hwaran Lee, **Geonmin Kim**, Sang-Hoon Oh, Soo-Young Lee, "Rescoring of N-best Hypotheses using Top-down Selective Attention for Automatic Speech Recognition", *IEEE Signal Processing Letters*, (2018)

4. Hwaran Lee, **Geonmin Kim**, Ho-Gyeong Kim, Sang-Hoon Oh, Soo-Young Lee, "Deep CNNs Along the Time Axis With Intermap Poling for Robustness to Spectral Variations", *IEEE Signal Processing Letters*, (2016)

International Conference

1. **Geonmin Kim**, Hwaran Lee, Bo-Kyeong Kim, Soo-Young Lee, "Compositional Sentence Representation from Character within Large Context Text", *International Conference on Neural Information Processing*, (2017)

2. Bo-Kyeong Kim, Suh-Yeon Dong, Jihyeon Roh, **Geonmin Kim**, Soo-Young Lee, "Fusing Aligned and Non-Aligned Face Information for Automatic Affect Recognition in the Wild: A Deep Learning Approach", IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPRWS), (2016)

3. Ho-Gyeong Kim, Jihyeon Roh, Hwaran Lee, **Geonmin Kim**, Soo-Young Lee, "Active Learning for Large-scale Object Classification: from Exploration to Exploitation", *International Conference on Human-Agent Interaction*, (2015)

4. **Geonmin Kim**, Chang-Hyun Kim, Soo-Young Lee, "Implement real-time polyphonic pitch detection and feedback system for the melodic instrument player",

International Conference on Neural Information Processing, 2012

AWARDS	**NIPS Conversational Intelligence Challenge 2017**	Dec. 2017
	Article-based chatbot which can carry on both question-answering and chitchat, *Awarded with 3rd place*.	
	Qualcomm Innovation Award	Mar. 2015
	Active learning for large-scale object classification: from exploration to exploitation	
TEACHING EXPERIENCE	Qualcomm innovation award chatbot hackerton committee	Summer 2018
	EE476 Audio-Visual Perception Models	Spring 2016-2017
	EE538 Neural Networks	Fall 2015-2017
SKILLS	Languages: Python, Lua, MATLAB, C/C++, CUDA	
	Libraries: PyTorch, Torch7, KALDI	
REFERENCES	Soo-Young Lee	+82.42.350.3431
	Professor Emeritus, School of Electrical Engineering	sylee@kaist.ac.kr
	Director, Institute for Artificial Intelligence	
	Korea Advanced Institute of Science and Technology	