RESUME

≫ BASIC INFO.

NAME	Ji-Hwan Kim
TELEPHONE NO.	+82-2-705-8924
E-MAIL	kimjihwan@sogang.ac.kr
HOMEPAGE	http://speech.sogang.ac.kr

≫ EDUCATIONAL BACKGROUND

- Ph.D. (Apr. 1998 ~ Nov. 2001)

  Machine Intelligence Laboratory (Formerly Speech, Vision and Robotics Laboratory)

  Cambridge University Engineering Department

  Major: Speech recognition
- M.E. (Mar. 1996 ~ Feb. 1998)

  Speech Interface Laboratory

  Korea Advanced Institute of Science and Technology (KAIST), Department of Computer Science

  Major: Speaker identification
- B.E. (Mar. 1992 ~ Feb. 1996)

  Korea Advanced Institute of Science and Technology (KAIST), Department of Computer Science

  Major: Computer science

  Minor: Industrial management
- Seoul Science High School (Mar. 1990 ~ Feb. 1992)

≫ EXPERIENCE

- Professor (Sep. 2016 ~ Present)
- Associate Professor (Sep. 2011 ~ Aug. 2016)

  Dept. of Computer Science and Engineering, Sogang University
- Assistant Professor (Sep. 2007 ~ Aug. 2011)

  Dept. of Computer Science and Engineering, Sogang University
- Chief Research Engineer (Mar. 2006 ~ Aug. 2007) & Senior Research Engineer (Dec. 2001 ~ Feb. 2006)

  LG Electronics Institute of Technology
  - Project Member (English speech recognition / Jan. 2007 ~ Aug. 2007)
  - Project Leader (Chinese speech recognition / Jun. 2004 ~ Dec. 2006)
  - Project Leader (Software quality engineering / Oct. 2005 ~ Oct. 2006)
  - Project Member (Korean/English speech recognition / Dec. 2001 ~ May 2004)
- Visiting Scholar (MIT Media Lab / Oct. 2004 ~ Nov. 2004)

≫ RESEARCH INTERESTS

- LSTM(Long Short Term Memory)-based Speech recognition
- Recurrent Neural Network for Discrete Input and Its Use in the Implementation of Korean Large-scale Language Model
- Efficient Audio Data Search Using Deep Neural Net

≫ SCI(E) PAPERS

- K. Kim, D. Jung, D. Lee, H. Lee, S. Park, M. Koo, J. Kim, J. Park. H. Jeon and Y. Lee, "Implementation of a Large-scale Language Model Adaptation in a Cloud Environment", *Multimedia Tools and Applications*, vol. 75, no. 9, pp. 5029~5045, May 2016.
- J. Park, G. Jang, J. Kim and S. Yeo, "Unsupervised Noise Reduction Scheme for Voice-based Information Retrieval in Mobile Environments", *Multimedia Tools and Applications*, vol. 75, no. 9, pp. 4981~4996, May 2016.
- S. Shin, S. Jang, D. Lee, U. Park and J. Kim, "Brainwave-based Mood Classification Using Regularized Common Spatial Pattern Filter", *KSII Transactions on Internet and Information Systems*, vol. 10 no. 2, pp. 807-824, Feb. 2016.
- J. Park and J. Kim, "Emotional Information Processing Based on Feature Vector Enhancement and Selection for Human-computer Interaction via Speech", *Telecommunication Systems*, vol. 60, no. 2, pp. 201~213, Oct. 2015.
- S. Kang, J. Kim and J. Seo, "Post-error Correction in Automatic Speech Recognition Using Discourse Information", *Advances in Electrical and Computer Engineering*, vol. 14, no. 2, pp. 53-56, May 2014.
- K. Kim, D. Lee, N. Cho, H. Jeon and J. Kim, "Self-Improvement of Voice Interface with User-input Spoken Query at Early Stage of Commercialization", *IEEE Transactions on Consumer Electronics*, vol. 59, no. 4, pp. 854–861, Nov. 2013.
- J. Myung, J. Kim, J. Park, M. Koo and J. Kim, "Two-pass Search Strategy Using Accumulated Band

Energy Histogram for HMM-based Identification of Perceptually Identical Music", *International Journal of Imaging Systems and Technology*, vol. 23, no. 2, pp. 127-132, Jun. 2013.

- H. Kim, G. Jang, J. Park, J. Kim and Y. Oh, "Particle Filtering Based Pitch Sequence Correction for Monaural Speech Segregation", *International Journal of Imaging Systems and Technology*, vol. 23, no. 1, pp. 64-70, Mar. 2013.

- J. Park, G. Jang, J. Kim and S. Kim, "Acoustic Interference Cancellation for a Voice-driven Interface in Smart TVs", *IEEE Transactions on Consumer Electronics*, vol. 59, no. 1, pp. 244–249, Feb. 2013.

- G. Jang, C. Pan, J. Park, J. Park and J. Kim, "Recognition Unit Determination of Interactive Chinese Speech Recognition for Embedded Devices", *IEEE Transactions on Consumer Electronics*, vol. 58, no. 4, pp. 1353–1358, Nov. 2012.

- G. Jang, S. Kim and J. Kim, "Minimum Discrimination Information-based Language Model Adaptation Using Tiny Domain Corpora for Intelligent Personal Assistants", *IEEE Transactions on Consumer Electronics*, vol. 58, no. 4, pp. 1359-1365, Nov. 2012.

- J. Park, G. Jang and J. Kim, "Multistage Utterance Verification for Keyword Recognition-based Online Spoken Content Retrieval", *IEEE Transactions on Consumer Electronics*, vol. 58, no. 3, pp. 1000–1005, Aug. 2012

- H. Kim, G. Jang, J. Park, J. Kim and Y. Oh, "Speech Segregation based on Pitch Track Correction and Music-Speech Classification", *Advances in Electrical and Computer Engineering*, vol. 12, no. 2, pp. 15-20, May 2012.

- G. Jang, J. Park, J. Kim and Y. Seo, "Line Spectral Frequency-based Noise Suppression for Speech-Centric Interface of Smart Devices", *Advances in Electrical and Computer Engineering*, vol. 11, no. 4, pp. 3-8, Nov. 2011.

- C. Seon, J. Yoo, H. Kim, J. Kim and J. Seo, "Lightweight Named Entity Extraction for Korean Short Message Service Text", *KSII Transactions on Internet and Information Systems*, vol. 5 no. 3, pp. 560-574, Mar. 2011.

- K. Kim and J. Kim, "Domain Independent Vocabulary Generation and Its Use in Category-based Small Footprint Language Model", *Advances in Electrical and Computer Engineering*, vol. 11, no. 1, pp.77-84, Feb. 2011.

- J. Kim, "Transformation-based Named Entity Extraction from Spoken Content for Personal Memory Aid", *IEEE Transactions on Consumer Electronics*, vol. 54, no. 4, pp. 2606–2614, Nov. 2010.

- B. Oh, Y. Na, J. Yang, S. Park, J. Nang and J. Kim, "Genetic Algorithm-based Dynamic Vehicle Route Search using Car-to-Car Communication", *Advances in Electrical and Computer Engineering*, vol. 10, no. 4, pp. 81-86, Nov. 2010.

- M. Lim, K. Kim and J. Kim, "Domain Corpus Independent Vocabulary Generation for Embedded Continuous Speech Recognition", *IEEE Transactions on Consumer Electronics*, vol. 55, pp. 1631–1636, Aug. 2009.

- J. Park, J. Kim and Y. Oh, "Feature Vector Classification based Speech Emotion Recognition for Service Robots", *IEEE Transactions on Consumer Electronics*, vol. 55, pp. 1590–1596, Aug. 2009.

- J. Kim and P. Woodland, "Automatic Capitalisation Generation for Speech Input", *Computer Speech and Language*, vol. 18, no. 1, pp. 67-90, Jan. 2004.

- J. Kim and P. Woodland, "A Combined Punctuation Generation and Speech Recognition System and its Performance Enhancement Using Prosody", *Speech Communication*, vol. 41, no. 4, pp. 563-577, Nov. 2003.