



Name : Du Jun (杜俊) **E-mail:** jundu@ustc.edu.cn

Research Area:

1. Speech signal processing: speech separation/detection/dereverberation
2. Pattern recognition: speech recognition, handwriting recognition, OCR

Education

Ph. D degree, 2004-2009, University of Science and Technology of China (USTC)

Bachelor degree, 2000-2004, USTC

Work Experience

2013-present, USTC, Associate Professor,

2010-2013, Microsoft Research Asia (MSRA), Speech Group, Associate Researcher

2009-2010, iFlytek Research, Research Manager

Awards and Honors

2016, the best system for all three tasks of [CHiME-4 challenge](#)

2015, the 3rd place of [CHiME-3 challenge](#)

2015, the finalist of best student paper award for INTERSPEECH

2015, the finalist of best student paper award for LVA/ICA

2012, MSRA technology transfer award for contribution in Windows Phone 8

2012, Microsoft Ship-It award for Chinese handwriting recognition

2012, Microsoft Ship-It award for camera-based translation

2011, Microsoft Ship-It award for mouse-hovering function in Bing dictionary

2008, the finalist of best student paper award for ISCSLP

2006, the finalist of best student paper award for INTERSPEECH

2006, the finalist of best student paper award for ISCSLP

Selected Research Funding

2017-2020, NSFC (General Program), Grant No. 61671422

2014-2016, NSFC (Youth Program), Grant No. 61305002

Patent (Issued)

2016, Actionable content displayed on a touch screen, US Patent 9329692

2016, Rotation-free recognition of handwritten characters, US Patent 9251144

2015, Translating language characters in media content, US Patent 8977042

Service

IEEE/ISCA/IAPR/CIPS members

Reviewer for TASLP, SC, CSL, PR, PRL, TII, ICDAR, ICPR, ISCSLP, APSIPA, etc

Session Chair for ChinaSIP 2014/2015, ISCSLP 2016

Publications

I have published 60+ journal and conference papers (the publication before 2016 can refer to [Google Scholar website](#) with 528 citations in total). I listed the selected work.

1. **Jun Du**, Yong Xu, “Hierarchical Deep Neural Networks for Multivariate Regression,” Accepted by **Pattern Recognition**, 2016.
2. **Jun Du**, Yan-Hui Tu, Li-Rong Dai, and Chin-Hui Lee, “A regression approach to single-channel speech separation via high-resolution deep neural networks,” Accepted by **IEEE/ACM Transactions on Audio, Speech and Language Processing**, 2016.
3. Yong Xu, **Jun Du**^{*}, Li-Rong Dai, and Chin-Hui Lee, “A regression approach to speech enhancement based on deep neural networks,” **IEEE/ACM Transactions on Audio, Speech and Language Processing**, Vol. 23, No. 1, pp.7-19, 2015. (**Google Scholar Citation: 68**)
4. Yong Xu, **Jun Du**^{*}, Li-Rong Dai, and Chin-Hui Lee, “An experimental study on speech enhancement based on deep neural networks,” **IEEE Signal Processing Letters**, Vol. 21, No. 1, pp.65-68, 2014. (**Google Scholar Citation: 134**)
5. **Jun Du** and Qiang Huo, “An irrelevant variability normalization approach to discriminative training of multi-prototype based classifiers and its applications for

- online handwritten Chinese character recognition,” **Pattern Recognition**, Vol. 47, No. 12, pp.3959-3966, 2014.
6. **Jun Du** and Qiang Huo, “An improved VTS feature compensation using mixture models of distortion and IVN training for noisy speech recognition,” **IEEE/ACM Transactions on Audio, Speech and Language Processing**, Vol. 22, No. 11, pp.1601-1611, 2014.
 7. **Jun Du** and Qiang Huo, “A discriminative linear regression approach to adaptation of multi-prototype based classifiers and its applications for Chinese OCR,” **Pattern Recognition**, Vol. 46, No. 8, pp.2313-2322, 2013.
 8. **Jun Du**, Yu Hu, and Hui Jiang, “Boosted mixture learning of Gaussian mixture hidden Markov models based on maximum likelihood for speech recognition,” **IEEE Trans. on Audio, Speech and Language Processing**, Vol. 19, No. 7,, pp.2091-2100, 2011.
 9. **Jun Du**, and Qiang Huo, “A feature compensation approach using high-order vector Taylor series approximation of an explicit distortion model for noisy speech recognition,” **IEEE Trans. on Audio, Speech and Language Processing**, Vol. 19, No. 8, pp.2285-2293, 2011.
 10. Qing Wang, **Jun Du**^{*}, Xiao Bao, Zi-Rui Wang, Li-Rong Dai, and Chin-Hui Lee, “A universal VAD based on jointly trained deep neural networks,” Proc. INTERSPEECH 2015. (**Best student paper finalist**)
 11. Tian Gao, **Jun Du**^{*}, Yong Xu, Cong Liu, Li-Rong Dai, and Chin-Hui Lee, “Improving deep neural network based speech enhancement in low SNR environments,” Proc. LVA/ICA 2015. (**Best student paper finalist**)
 12. **Jun Du**, Qiang Huo, and Yu Hu, “Evaluation of a feature compensation approach using high-order vector Taylor series approximation of an explicit distortion model on Aurora2, Aurora3, and Aurora4 tasks,” Proc. ISCSLP, 2008, pp.81-84. (**Best student paper finalist**)
 13. **Jun Du**, Peng Liu, Frank Soong, Jian-Lai Zhou, and Ren-Hua Wang, “Minimum divergence based discriminative training,” Proc. INTERSPEECH, 2006, pp.2410-2413. (**Best student paper finalist**)
 14. **Jun Du**, Peng Liu, Frank Soong, Jian-Lai Zhou, and Ren-Hua Wang, “Noisy speech recognition performance of discriminative HMMs,” Proc. ISCSLP, 2006, pp.358-369. (**Best student paper finalist**)