### A list of the most relevant publications for the project

#### **Book:**

1. 俞凯,**钱彦旻**. 译著: 解析深度学习-语音识别实践. 电子工业出版社, 2016: ISBN 978-7-121-28796-1

### **Book Chapters:**

1. Khe Chai Sim and **Yanmin Qian**. Adaptation of Deep Neural Network Acoustic Models for Robust Automatic Speech Recognition, in New Era for Robust Speech Recognition: Exploiting Deep Learning. Springer, 219-243, 2017: ISBN 978-3-319-64680-0

# Journal Papers:

- 1. **Yanmin Qian**, Xuankai Chang, Dong Yu. Single-Channel Multi-talker Speech Recognition with Permutation Invariant Training. **Speech Communication**, vol. 104, 1-11, 2018.
- 2. Tian Tan, Yanmin Qian (Corresponding author), Hu Hu, Ying Zhou, Wen Ding, Kai Yu. Adaptive Very Deep Convolutional Residual Network for Noise Robust Speech Recognition. IEEE/ACM Transactions on Audio, Speech, and Language Processing, vol. 26, no. 8, 1393-1405, 2018.
- 3. Yanmin Qian, Chao Wen, Xuankai Chang, Shuai Wang, Dong Yu. Past Review, Current Progress, and Challenges Ahead on the Cocktail Party Problem. Frontiers of Information Technology & Electronic Engineering, 19 (1), 40-63, 2018. (特邀稿件综述文章)
- 4. **Yanmin Qian**, Mengxiao Bi, Tian Tan, Kai Yu. Very Deep Convolutional Neural Networks for Noise Robust Speech Recognition. **IEEE/ACM Transactions on Audio, Speech and Language Processing**, vol. 24, no. 12, 2263-2276, 2016.
- 5. Yanmin Qian, Tian Tan and Dong Yu. Neural Network Based Multi-Factor Aware Joint Training for Robust Speech Recognition. IEEE/ACM Transactions on Audio, Speech, and Language Processing, vol. 24, no. 12, 2231-2240, 2016.
- 6. Tian Tan, Yanmin Qian (Corresponding author) and Kai Yu. Cluster Adaptive Training for Deep Neural Network Based Acoustic Model. IEEE/ACM Transactions on Audio, Speech, and Language Processing, vol. 24, no. 3, 459-468, 2016.

## **Conference Papers:**

- 7. **Yanmin Qian**, Tian Tan and Dong Yu. An investigation into using parallel data for far-field speech recognition. In proceedings of **ICASSP**, Shanghai, China, 2016: 5725-5729.
- 8. **Yanmin Qian**, Tian Tan, Dong Yu and Yu Zhang. Integrated adaptation with multi-factor joint-learning for far-field speech recognition. In proceedings of **ICASSP**, Shanghai, China, 2016: 5770-5774.
- 9. Tian Tan, **Yanmin Qian**, Dong Yu, Souvik Kundu, Liang Lu, Khe Chai SIM, Xiong Xiao and Yu Zhang. Speakeraware training of LSTM-RNNS for acoustic modeling. In proceedings of **ICASSP**, Shanghai, China, 2016: 5280-5284.
- 10. Dong Yu, Xuankai Chang and **Yanmin Qian**. Recognizing Multi-talker Speech with Permutation Invariant Training. In proceedings of **InterSpeech**, Stockholm, Sweden, 2017: 2456-2460.
- 11. **Yanmin Qian**, Tian Tan, Hu Hu and Qi Liu. Noise Robust Speech Recognition On Aurora4 By Humans And Machines. In proceedings of **ICASSP**, Calgary, Canada, 2018: 5604-5608.
- 12. Shuai Wang, **Yanmin Qian** and Kai Yu. Focal KL-Divergence based Dilated Convolutional Neural Networks for Co-channel Speaker Identification. In proceedings of **ICASSP**, Calgary, Canada, 2018: 5339-5343.
- 13. Tian Tan, **Yanmin Qian** and Dong Yu. Knowledge Transfer in Permutation Invariant Training for Single-channel Multi-talker Speech Recognition. In proceedings of **ICASSP**, Calgary, Canada, 2018: 5714-5718.

- 14. Xuankai Chang, **Yanmin Qian** and Dong Yu. Adaptive Permutation Invariant Training with Auxiliary Information for Monaural Multi-Talker Speech Recognition. In proceedings of **ICASSP**, Calgary, Canada, 2018: 5974-5978.
- 15. Ying Zhou and **Yanmin Qian**. Robust Mask Estimation by Integrating Neural Network-Based and Clustering-Based Approaches for Adaptive Acoustic Beamforming. In proceedings of **ICASSP**, Calgary, Canada, 2018: 536-540.
- 16. Wen Ding, Tian Tan and **Yanmin Qian**. Fast Adaptation on Deep Mixture Generative Network Based Acoustic Modeling. In proceedings of **ICASSP**, Calgary, Canada, 2018: 5944-5948.
- 17. Xuankai Chang, **Yanmin Qian** and Dong Yu. Monaural Multi-Talker Speech Recognition with Attention Mechanism and Gated Convolutional Networks. In proceedings of **InterSpeech**, Hyderabad, India, 2018: 1586-1590.
- 18. Jun Wang, Jie Chen, Dan Su, Lianwu Chen, Meng Yu, **Yanmin Qian** and Dong Yu. Deep Extractor Network for Target Speaker Recovery from Single Channel Speech Mixtures. In proceedings of **InterSpeech**, Hyderabad, India, 2018: 307-311.
- 19. Lianwu Chen, Meng Yu, **Yanmin Qian**, Dan Su and Dong Yu. Permutation Invariant Training of Generative Adversarial Network for Monaural Speech Separation. In proceedings of **InterSpeech**, Hyderabad, India, 2018: 302-306.
- 20. Xuankai Chang, **Yanmin Qian**, Kai Yu and Shinji Watanabe. End-to-End Monaural Multi-Speaker ASR System Without Pretraining. Accepted by **ICASSP**, Brighton, United Kingdom, 2019.