

## **P. C. Ching 程伯中**

### **Publications in Book Chapters, International Journals and Conference Proceedings :**

#### **A. Book Chapters**

1. Houwei Cao, Tan Lee, **P.C. Ching**, "Development of the Chinese-English Code-mixing Speech Corpora", Computer Processing of Asian Languages, ed. by Shuichi Itahashi and C.Y. Tseng, 1<sup>st</sup> ed. pp. 204-207, Japan Consideration Books, March 2010
2. Nengheng Zheng, C. Qin, Tan Lee, **P.C. Ching**, "A Dual Condition Cantonese Speech Database for Speaker Recognition", Computer Processing of Asian Languages, ed. by Shuichi Itahashi and C.Y. Tseng, 1<sup>st</sup> ed. pp. 90-93, Japan Consideration Books, March 2010
3. **P.C. Ching**, Tan Lee, W.K. Lo, Helen Meng, "Cantonese Speech Recognition and Synthesis", Advances in Chinese Spoken Language Processing, ed. by C.H. Lee, H. Li, L.S. Lee, R. Wang, and Q. Huo, pp. 365-386, Singapore: Springer-Verlag, December 2006

#### **B. Refereed Journal Publications**

1. Tong Zhang, Shuai Wang, Yinfei Xu, Rui Wang, **P.C. Ching**, H. Vincent Poor, "The Generalized Degrees-of-Freedom Region of the Two-User MIMO Broadcast Channel With Delayed CSIT," IEEE Transactions on Information Theory, Vol. 70, No. 2, pp.1167-1177, Feb. 2024
2. Shuo Zheng, Bojie Lv, Tong Zhang, Yinfei Xu, Gaojie Chen, Rui Wang, **P.C. Ching**, "On DoF of Active RIS-Assisted MIMO Interference Channel with Arbitrary Antenna Configurations: When Will RIS Help?," IEEE Transactions on Vehicular Technology, Vol. 72, No. 12, pp.16828-16833, Dec. 2023
3. Yao Ge, **P.C. Ching**, "Energy Efficiency for Proactive Eavesdropping in Cooperative Cognitive Radio Networks," IEEE Internet of Things Journal, Vol. 9, No. 15, pp.13442-13457, Aug. 2022
4. Shuiyang Mao, **P.C. Ching**, Tan Lee, "Enhancing Segment-Bases Speech Emotion Recognition by Iterative Self-Learning," IEEE Transactions on Audio, Speech and Language Processing, Vol. 30, pp.123-134, Aug. 2022
5. Xiongwei Wu, Jun Li, Ming Xiao, **PC Ching**, H. Vincent Poor, "Multi-Agent Reinforcement Learning for Cooperative Coded Caching via Homotopy Optimization", IEEE Transactions on Wireless Communications, Vol. 20, No. 8, pp.746-759, Aug. 2021
6. Yao Ge, Qinwen Deng, **P.C. Ching**, Zhi Ding, "Receiver Design for OTFS with a Fractionally Spaced Sampling Approach," IEEE Transactions on Wireless Communications, Vol. 20, No. 7, pp.4072-4086, July 2021.
7. Yao Ge, Qinwen Deng, **P.C. Ching**, Zhi Ding, "OTFS Signaling for Uplink NOMA of Heterogeneous Mobility Users," IEEE Transactions on Communications, Vol. 69, No. 5, pp.3147-3161, May 2021.
8. Xiongwei Wu, Qiang Li, Xinhua Li, Victor C.M. Leung, **P.C. Ching**, "Joint Long-Term Cache Updating and Short-Term Content Delivery in Cloud-Based Small Cell Networks," IEEE Transactions on Communications, Vol. 68, No. 5, pp.3173-3186, May 2020.
9. Xiongwei Wu, Qiang Li, Victor C.M. Leung, **P.C. Ching**, "Joint Fronthaul Multicast and Cooperative Beamforming for Cache-Enabled Cloud-Based Small Cell Networks: An MDS Codes-Aided Approach," IEEE Transactions on Wireless Communications, Vol. 18, No. 10, pp.4970-4982, Oct. 2019.

10. Ran Cai, Yun Liu and **P.C. Ching**, "Transmission Code Design for Asynchronous Full-Duplex Relaying," *International Journal of Electrical and Computer Systems (IJECS)*, Vol. 3, pp 1-8, 2017.
11. Yun Liu, Wei Zhang, and **P.C. Ching**, "Time-Reversal Space-Time Codes in Asynchronous Two-Way Relay Networks," *IEEE Transactions on Wireless Communications*, Vol. 15, No. 3, pp.1729-1741, March 2016.
12. R. Cai, W. Zhang, and **P.C. Ching**, "Cost-Efficient Optimization of Base Station Densities for Multi-tier Heterogeneous Cellular Networks," *IEEE Transactions on Wireless Communications*, vol. 15, no. 3, pp. 2381-2393, March 2016.
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15. C. Zhai, W. Zhang, and **P.C. Ching**, "Cooperative Spectrum Sharing Based on Two-Path Successive Relaying," *IEEE Transactions on Communications*, Vol. 61, No. 6, pp.2260-2270, June 2013
16. Y. Yang, Q. Li, Wing-Kin Ma, J.-H. Ge, and **P.C. Ching**, "Cooperative Secure Beamforming for AF Relay Networks With Multiple Eavesdroppers", *IEEE Signal Process. Lett.*, vol. 20, no. 1, pp.35-39, Jan. 2013.
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21. Y.C. Joyce Chan, Houwei Cao, **P.C. Ching**, Tan Lee, "Automatic recognition of Cantonese-English code-mixing speech", *International Journal of Computational Linguistics and Chinese Language Processing*, Volume 14, No. 3, September 2009, pp281-304
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23. Wei Zhang, Yabo Li, Xiang-Gen Xia, **P.C. Ching**, Khaled Ben Letaief, "Distributed Space-Frequency Coding for Cooperative Diversity in Broadband Wireless Ad Hoc Networks", *IEEE Transactions on Wireless Communications*, Volume 7, Issue 3, March 2008, pp. 995-1003
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25. Wei Zhang, Xiang-Gen Xia, **Ching, P.C.**, "Full-Diversity and Fast ML Decoding Properties of General Orthogonal Space-Time Block Codes for MIMO-OFDM Systems", *IEEE Transactions on Wireless Communications*, Volume 6, Issue 5, May 2007, pp. 647-653
26. Nengheng Zheng; Tan Lee, **P.C. Ching**, "Integration of Complementary Acoustic Features for Speaker Recognition", *IEEE Signal Processing Letters*, Volume 14, Issue 3, March 2007, pp. 181-184
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### C. Refereed Conference Papers

1. Xiongwei Wu, Xinhua Li, Jun Li, **P.C. Ching** and H. Vincent Poor, "Deep Reinforcement Learning for IoT Networks: Age of Information and Energy Cost Tradeoff," in Proc. IEEE GLOBECOM 2020, Virtual Conference, Dec. 8-10, 2020.
2. Shuiyang Mao, **P.C. Ching**, C.C. Jay Kuo and Tan Lee, "Advanced Multiple Instance Learning with Attention Modeling for Categorical Speech Emotion Recognition," in Proc. Interspeech 2019, Shanghai, China, pp. 2357-2361, Oct. 25-29, 2020.
3. Shuiyang Mao, **P.C. Ching** and Tan Lee, "EigenEmo : Spectra; Utterance Representation Using Dynamic Mode Decomposition for Speech Emotion Classification," in Proc. Interspeech 2019, Shanghai, China, pp. 2352-2356, Oct. 25-29, 2020.
4. Shuiyang Mao, **P.C. Ching** and Tan Lee, "Emotion Profile Refinery for Speech Emotion Classification," in Proc. Interspeech 2019, Shanghai, China, pp. 531-535, Oct. 25-29, 2020.
5. Xiongwei Wu, Qiang Li, Yawei Lu, H. Vincent Poor, Victor C.M. Leung and **P.C. Ching**, "Latency-Minimized Design of Secure Transmission in UAV-Aided Communications," in Proc. IEEE ICASSP 2019, Virtual Conference, pp. 8753-8757, May 4-9, 2020.
6. Yao Ge and **P.C. Ching**, "Spectrum Sharing and Energy Cooperation in Wireless Powered Cognitive Radio Networks" in Proc. 2019 IEEE Vehicular Technology Conference, Honolulu, USA, Sept. 22-25, 2019.
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8. Xiongwei Wu, Qiang Li, Xinhua Li, Victor C.M. Leung and **P.C. Ching**, "Joint Long-Term Cache Allocation and Short-Term Content Delivery in Green Cloud Small Cell Networks," in Proc. 2019 IEEE International Conference on Communications (ICC), Shanghai, China, May 20-24, 2019.
9. Shuiyang Mao and **P.C. Ching**, "Revisiting Hidden Markov Models for Speech Emotion Recognition," in Proc. IEEE ICASSP 2019, Brighton, UK, pp. 6715-6719, May 12-17, 2019.
10. Xiongwei Wu, Xinhua Li, Qiang Li, Victor C.M. Leung and **P.C. Ching**, "Latency Driven Fronthaul Bandwidth Allocation and Cooperative Beamforming for Cache-Enabled Cloud-Based Small Cell Networks," in Proc. IEEE ICASSP 2019, Brighton, UK, pp. 4594-4598, May 12-17, 2019.
11. Tong Zhang and **P.C. Ching**, "Secure MIMO Interference Channel with Confidential Messages and Delayed CSIT," in Proc. IEEE ICASSP 2019, Brighton, UK, pp. 2437-2441, May 12-17, 2019.

12. Shuiyang Mao and **P.C. Ching**, "An Effective Discriminative Learning Approach for Emotion-Specific Features Using Deep Neural Networks," in Proc. 2018 International Conference, ICONIP, Dec. 13-16, 2018, Siem Reap, Cambodia, pp. 50-61.
13. Yuanyuan Liu, Tan Lee, Thomas Law, Kathy Lee and **P.C. Ching**, "Prediction of Voice Disorder Severity: Contributions from Sustained Vowels and Continuous Speech" in Proc. 2018 International Symposium on Chinese Spoken Language Processing (ISCSLP), Nov. 26-29, 2018, Taipei, Taiwan.
14. Yuanyuan Liu, Ying Qin, Siyuan Feng, Tan Lee and **P.C. Ching**, "Disordered Speech Assessment Using Kullback-Leibler Divergence Features with Multi-Task Acoustic Modeling," in Proc. 2018 International Symposium on Chinese Spoken Language Processing (ISCSLP), Nov. 26-29, 2018, Taipei, Taiwan.
15. Yao Ge and **P.C. Ching**, "Robust Secrecy Design for MIMO SWIFT with Artificial Noise and Full-Duplex Receiver Jamming" in Proc. 2018 IEEE Global Conference on Signal and Information Processing, Anaheim, California, USA, pp. 1296-1300, Nov. 26-29, 2018.
16. Xiongwei Wu and **P.C. Ching**, "Content Delivery Design for Cache-Aided Cloud Access Network to Achieve Low Latency," in Proc. IEEE ICASSP 2018, Calgary, Canada, pp. 3749-3753, April 15-20, 2018.
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