

The Chinese University of Hong Kong
Shun Hing Institute of Advanced Engineering
List of Publications Arising from SHIAE Supported Projects
(Batch 2019)

Project code	Publication
BME-p5-19 Prof. CHAN Hon Fai ITERM/ BME	[1] J[1] S. Deng, Y. Zhu, X. Zhao, J. Chen, R.S. Tuan, H.F. Chan, “Efficient fabrication of monodisperse hepatocyte spheroids and encapsulation in hybrid hydrogel with controllable extracellular matrix effect” Biofabrication, IOP Publishing, 14:015002, 2022
	[2] J[2] Y. Zhu, S. Deng, X. Zhao, G. Xia, R. Zhao, H.F. Chan, “Deciphering and engineering tissue folding: A mechanical perspective” Acta Biomaterialia, Elsevier, 134 (15): 32-42, 2021
	[3] C[1] H.F. Chan, R. Zhao, G. Parada, H. Meng, K.W. Leong, L. Griffith, X. Zhao, “Development-inspired engineering of folded mucosa guided by mechanics model” 9th WACBE World Congress in Bioengineering, WACBE, Taipei, 2019
	[4] H.F. Chan, “Young Scholar Award”, World Association for Chinese Biomedical Engineers (2019)
BME-p9-19 Prof. Liting DUAN (BME)	[1] J[1] P. Huang, A. Liu, Y. Song, J.M. Hope, B. Cui and L. Duan*, “Optical activation of TrkB signaling”, Journal of Molecular Biology, 432(13), pp.3761-3770. [2020]
	[2] J[2] Y. Song, P. Huang, X. Liu, Z. Zhao, Y. Wang, B. Cio and L. Duan*, “Light-inducible deformation of mitochondria in live cells”, Cell Chemical Biology, online. [2021]
	[3] J[3] P. Huang, Z. Zhao and L. Duan*, “Optogenetic activation of intracellular signaling based on light-inducible protein-protein homo-interactions”, Neural Regeneration Research, 17(1), p.25. [2022]
MMT-p1-19 Prof. Xunying LIU (SEEM)	[1] J[1] Shansong Liu, Mengzhe Geng, Shoukang Hu, Xurong Xie, Mingyu Cui, Jianwei Yu, Xunying Liu and Helen Meng. Recent Progress in the CUHK Dysarthric Speech Recognition System, IEEE/ACM Transactions on Audio, Speech and Language Processing, Volume 29, Pages 2267-2281, 2021.
	[2] J[2] Rongfeng Su, Xunying Liu, Lan Wang and Jingzhou Yang. Cross-Domain Deep Visual Feature Generation for Mandarin Audio-Visual Speech Recognition, IEEE/ACM Transactions on Audio, Speech and Language Processing, Volume 28, Issue 1, December 2020, Pages 185-197. [DOI]
	[3] C[1] Liu, S., Hu, S., Wang, Y., Yu, J., Su, R., Liu, X., Meng, H. (2019) Exploiting Visual Features Using Bayesian Gated Neural Networks for Disordered Speech Recognition. Proc. Interspeech 2019, 4120-4124, doi: 10.21437/Interspeech.2019-1536, ISCA Student Paper Award Nomination
	[4] C[2] Liu, S., Hu, S., Liu, X., Meng, H. (2019) On the Use of Pitch Features for Disordered Speech Recognition. Proc. Interspeech 2019, 4130-4134, doi: 10.21437/Interspeech.2019-2609
	[5] C[3] Hu, S., Liu, S., Chang, H.F., Geng, M., Chen, J., Chung, L.W., Hei, T.K., Yu, J., Wong, K.H., Liu, X., Meng, H. (2019) The CUHK Dysarthric Speech Recognition Systems for English and Cantonese. Proc. Interspeech 2019, 3669-3670
	[6] C[4] Shoukang Hu, Sirui Xie, Hehui Zheng, Chunxiao Liu, Jianping Shi, Xunying Liu, Dahua Lin; Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2020, pp. 12084-12092 [DOI]
	[7] C[5] Geng, M., Xie, X., Liu, S., Yu, J., Hu, S., Liu, X., Meng, H. (2020) Investigation of Data Augmentation Techniques for Disordered Speech Recognition. Proc. Interspeech 2020, 696-700, doi: 10.21437/Interspeech.2020-1161

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MMT-p1-19 Prof. Xunying LIU (SEEM)	[8] C[6] Liu, S., Xie, X., Yu, J., Hu, S., Geng, M., Su, R., Zhang, S.-X., Liu, X., Meng, H. (2020) Exploiting Cross-Domain Visual Feature Generation for Disordered Speech Recognition. Proc. Interspeech 2020, 711-715, doi: 10.21437/Interspeech.2020-2282
	[9] C[7] Jianwei Yu, Shixiong Zhang, Jian Wu, Shahram Ghorbani, Bo Wu, Shiyin Kang, Shansong Liu, Xunying Liu, Helen Meng, Dong Yu. AUDIO-VISUAL RECOGNITION OF OVERLAPPED SPEECH FOR THE LRS2 DATASET, IEEE Signal Processing Society Travel Grant Winner, IEEE ICASSP2020, Barcelona, Spain.
	[10] C[8] Shoukang Hu, Xurong Xie, Shansong Liu, Mingyu Cui, Mengzhe Geng, Xunying Liu, Helen Meng. Neural Architecture Search For LF-MMI Trained Time Delay Neural Networks, IEEE ICASSP2021, Toronto, Canada.
	[11] C[9] Geng, M., Liu, S., Yu, J., Xie, X., Hu, S., Ye, Z., Jin, Z., Liu, X., Meng, H. (2021) Spectro-Temporal Deep Features for Disordered Speech Assessment and Recognition. Proc. Interspeech 2021, 4793-4797, doi: 10.21437/Interspeech.2021-60
	[12] C[10] Jin, Z., Geng, M., Xie, X., Yu, J., Liu, S., Liu, X., Meng, H. (2021) Adversarial Data Augmentation for Disordered Speech Recognition. Proc. Interspeech 2021, 4803-4807, doi: 10.21437/Interspeech.2021-168
RNE-p5-19 Prof. Yunjian XU (MAE)	[1] J[1] L. Hao, Y. Xu*, and L. Tong, "Asymptotically optimal index policies for deadline scheduling with processing rate limits," conditionally accepted to IEEE Trans. on Automatic Control, IEEE, 2020 .
	[2] J[2] J. Jin and Y. Xu*, "Segregated linear decision rules for distributionally robust control with linear dynamics and quadratic cost," accepted to IEEE Systems Journal, IEEE, 2020 .
	[3] J[3] J. Jin and Y. Xu*, "Joint Scheduling of Deferrable Demand and Storage with Random Supply and Processing Rate Limits," conditionally accepted to IEEE Trans. on Automatic Control, IEEE, 2020 .
	[4] J[4] J. Jin, Y. Xu*, and Z. Yang, "Optimal deadline scheduling for electric vehicle charging with energy storage and random supply," accepted to Automatica, 2020 .
	[5] J[5] Y. Zhao and Y. Xu, "Model Predictive Control based Cost-Minimizing Energy Management System for PV-Integrated Electric Vehicle Charging Stations," submitted to IEEE Trans. on Power Electronics .
	[6] C[1] L. Hao and Y. Xu*, "Index Policies for Stochastic Deadline Scheduling with Time-varying Processing Rate Limits," American Control Conference, Denver, CO, USA, July 1-3, 2020 .
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