The Chinese University of Hong Kong
Shun Hing Institute of Advanced Engineering
List of Publications Arising from SHIAE Supported Projects
(Batch 2020)

Project code		Publication
BME-p3-20 - Prof. Wu YUAN (BME)	[1]	J[1] W. Yuan, J. Thiboutot, H. Park, A. Li, J. Loube, W. Mitzner, L. Yarmus, R. H. Brown, and X. Li, "Threedimensional quantification of tissue microcompartments in small airways in vivo using deep-learning assisted diffractive optical coherence tomography", European Respiratory Journal,
	[2]	J[2] J. Thiboutot, W. Yuan, H. Park, A. Li, J. Loube, W. Mitzner, L. Yarmus, X. Li and R. H. Brown, "Visualization and validation of the structural components in the airway wall in vivo with diffractive optical coherence tomography", Journal of Applied Physiology, submitted.
BME-p7-20 Prof. CHENG Shing Shin (MAE)	[1]	J[1] Wenhui Zeng, Junyan Yan, Yilun Hong, and Shing Shin Cheng*. Numerical analysis of large deflection of the cantilever beam subjected to a force pointing at a fixed point. Applied Mathematical Modelling, 92, 719-730, 2020.
	[2]	J[2] Wenhui Zeng, Junyan Yan, Kim Yan, Xu Huang, Xuefeng Wang, and Shing Shin Cheng*. Modeling 2-DoF Symmetrically-notched Continuum Neurosurgical Robot with Non-constant Curvature and Superelastic Property. IEEE Robotics and Automation Letters, 2021. (Resubmitted after minor revision.)
	[3]	C[1] Wenhui Zeng, Junyan Yan, and Shing Shin Cheng*. Motion Coupling Analysis for the Decoupled Design of a Two-segment Notched Continuum Robot. IEEE International Conference on Robotics and Automation (ICRA), 2021 (Accepted).
MMT-p5-20 Prof. Qi DOU (CSE)	[1]	[1] Gao, X., Jin, Y., Zhao, Z., Dou, Q.*, and Heng, P. A., "Future Frame Prediction for Robot-assisted Surgery", *International Conference on Information Processing in Medical Imaging (IPMI)* , 2021. (Oral)
	[2]	[2] Zhao, Z., Jin, Y.*, Gao, X., Dou, Q., and Heng, P. A. "Learning Motion Flows for Semi-supervised Instrument Segmentation from Robotic Surgical Video," *International Conference on Medical Image Computing and Computer-Assisted Intervention* , Springer, pp. 679-689, 2020.
	[3]	[3] Jin, Y., Long, Y., Chen, C., Zhao, Z., Dou, Q., and Heng, P. A., "Temporal Memory Relation Network for Workflow Recognition from Surgical Video", *IEEE Transactions on Medical Imaging* , 2021.
	[4]	[4] Long, Y., Wu, J. Y., Lu, B., Jin, Y., Unberath, M., Liu, Y. H., Heng, P. A., and Dou, Q.*, "Relational Graph Learning on Visual and Kinematics Embeddings for Accurate Gesture Recognition in Robotic Surgery", *International Conference on Robotics and Automation (ICRA)* , 2021.
Last Updated: 15 July 2022		