BAI Fan

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Education

➢ **The Chinese University of Hong Kong, PhD candidate;**
Electronic Engineering;   2020.08-2024.07
Supervisor: Prof. Max Q.-H. Meng;

➢ **Northeastern University, Bachelor;**
Faculty of Robot Science and Engineering, Robot Engineering;   2016.09-2020.07
GPA: 92/100, Rank: 1/60, 3 National Scholarships and First-class Scholarships;

Research and Interest

The theory and application of active learning, weakly/self-/un-/semi-supervised learning. Such as image, point cloud, video, object detection, and semantic segmentation and other tasks that are difficult to label.

Academic Experience

➢ **Discrepancy-based Active Learning for Weakly Supervised Bleeding Segmentation in Wireless Capsule Endoscopy Images (Under Review)**   MICCAI 2022
·**Fan Bai**, Xiaohan Xing, Yutian Shen, Han Ma, Max Q.-H. Meng

➢ **Task-relevant Feature Replenishment for Cross-centre Polyp Segmentation (Under Review)**   MICCAI 2022
·Yutian Shen, Ye Lu, Xiao Jia, **Fan Bai**, Max Q.-H. Meng

➢ **LGPNet: Alleviating A Few Labeled Data and Large-Scale Network Dilemmas in Grasping Detection (Under Review)**   IROS 2022
·Tianhe Wu, Hongbo Chu, **Fan Bai**, Wenxing Liu, Dan Wang

➢ **Hierarchical Policy with Deep Reinforcement Learning for Non-prehensile Multi-object Rearrangement (Under Review)**   Biomimetic Intelligence and Robotics
·**Fan Bai**, Fei Meng, Jianbang Liu, Jiankun Wang, Max Q.-H. Meng

➢ **Active Semi-supervised Grasp Pose Detection with Geometric Consistency**   ROBIO 2022
·**Fan Bai,** Delong Zhu, Hu Cheng, Peng Xu, and Max Q.-H. Meng

➢ **Shape Tracking of Flexible Morphing Matters From Depth Images**   IEEE Sensors Journal
·L. Seenivasan, **Fan Bai**, Ming Ji, Xiaoyi Gu, Zion Tsz Ho Tse, Hongliang Ren

➢ **Robotic Grasp Pose Estimation Oriented Deep Learning Algorithm Based on Residual Network**   ISCSIC 2019
·**Fan Bai,** Renjie Yao, Maoning Chen, Zhexin Cui

➢ **Point Cloud Semantic Segmentation Based on Fusion of Points and Sparse Voxels**   Outstanding Undergraduate Thesis

Other Awards

◆ Won The Meritorious Winner in International Mathematical Contest in Modeling for 2 times

◆ National Excellent Project for College Students' Innovation Training Program (Leader)

◆ CUHK Vice-Chancellor's PhD Scholarship, Liaoning General Higher Education Outstanding Graduate, Excellent College Students in Shenyang, Shenyang Mayor Scholarship, Top Ten Undergraduates in Northeastern University

◆ Github 200★ awesome-acitve-learning paper list

Skills

● Python, MATLAB, C/C++, Pytorch, Tensorflow, Keras, Robot Operating System (ROS)