

2021-2022 Medical Vision Seminar

Week	Paper Title	Reporter
2021/6/30	1. (CVPR20) Structure Boundary Preserving Segmentation for Medical Image with Ambiguous Boundary 2. (CVPR21) DoDNet: Learning to segment multi-organ and tumors from multiple partially labeled datasets	Luyue Shi
	1. (CVPR20) Augmenting Colonoscopy using Extended and Directional CycleGAN for Lossy Image Translation 2. (CVPR21) Multi-institutional Collaborations for Improving Deep Learning-based Magnetic Resonance Image Reconstruction Using Federated Learning	Haoyu Chen
2021/7/7	1. (CVPR2021) XProtoNet: Diagnosis in Chest Radiography with Global and Local Explanations 2. (ISBI2021) Geometric Loss for Deep Multiple Sclerosis Lesion Segmentation	Lufei Gao
	1. (CVPR2021) DARCNN: Domain Adaptive Region-based Convolutional Neural Network for Unsupervised Instance Segmentation in Biomedical Images 2. (ISBI2021) Towards Unbiased Covid-19 Lesion Localisation and Segmentation Via Weakly Supervised Learning	Jinyue Cai
2021/7/14	1. (CVPR2021) Learning Calibrated Medical Image Segmentation via Multi-Rater Agreement Modeling 2. (MICCAI2021) QUBIQ Challenge	Yicheng Jiang
	1. (CVPR2021) Group-Free 3D Object Detection via Transformers 2. (MICCAI2021) Medical Transformer: Gated Axial-Attention for Medical Image Segmentation	Congjie Ye
2021/7/21		Wentao Lei
	1. (CVPR2021) DiNTS: Differentiable Neural Network Topology Search for 3D Medical Image Segmentation	Wei Lou
2021/7/28	1. Disabling Backdoor and Identifying Poison Data by using Knowledge Distillation in Backdoor Attacks on Deep Neural Networks 2. Neural Attention Distillation: Erasing Backdoor Triggers from Deep Neural Networks	Rongjun Tang

2021/7/20	<ol style="list-style-type: none"> 1. (CVPR2021) FedDG: Federated Domain Generalization on Medical Image Segmentation via Episodic Learning in Continuous Frequency Space 2. (ISBI2020)ASCNet: Adaptive-Scale Convolutional Neural Networks for Multi-Scale Feature Learning 	Yujin Tang
2021/8/4	<ol style="list-style-type: none"> 1. (NeurIPS2020) Is normalization indispensable for training deep neural network? 2. (ISBI2020) Class-Center Involved Triplet Loss for Skin Disease Classification on Imbalanced Data 	Lei Liu
	<ol style="list-style-type: none"> 1. (ISBI) WEAKLY SUPERVISED PROSTATE TMA CLASSIFICATION VIA GRAPH CONVOLUTIONAL NETWORKS 2. (ISBI2020) WEAKLY-SUPERVISED BRAIN TUMOR CLASSIFICATION WITH GLOBAL DIAGNOSIS LABEL 	Wentao Lei
2021/8/11	<ol style="list-style-type: none"> 1. (Arxiv 2021.06) Medical Transformer: Universal Brain Encoder for 3D MRI Analysis 2. (Arxiv 2021.04) Emerging Properties in Self-Supervised Vision Transformers 	Congjie Ye
	<ol style="list-style-type: none"> 1. (MICCAI2020) Meta Corrupted Pixels Mining for Medical Image Segmentation 2. (MICCAI2021) Distilling effective supervision for robust medical image segmentation with noisy labels 	Luyue Shi
2021/8/18	<ol style="list-style-type: none"> 1. (NIPS 2020) Contrastive learning of global and local features for medical image segmentation with limited annotations 2. (NIPS 2020) Bootstrap Your Own Latent - A New Approach to Self-Supervised Learning 	Luoyao Kang
	调整到8月25号	Lufei Gao
2021/8/25	<ol style="list-style-type: none"> 1. (CVPR2020) MMTM: Multimodal Transfer Module for CNN Fusion 2. (AAAI2021) SMIL: Multimodal Learning with Severely Missing Modality 	Lufei Gao
	<ol style="list-style-type: none"> 1. (ICLR2019) Uncertainty-guided Continual Learning with Bayesian Neural Networks 2. (PNAS2017) Overcoming catastrophic forgetting in neural networks. 	Lei Liu

2021/9/1	1. (CVPR2020) FocalMix: Semi-Supervised Learning for 3D Medical Image Detection 2. (ICCV2017) Focal Loss for Dense Object Detection	Yicheng Jiang
	1. (NIPS2020) Rethinking Pre-training and Self-training 2. (CVPR2020) Deep Distance Transform for Tubular Structure Segmentation in CT Scans	Wei Lou
2021/9/8	1. (NIPS2018) Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs 2. (ICLR2017) SNAPSHOT ENSEMBLES: TRAIN 1, GET M FOR FREE	Wentao Lei
	1. (CVPR 2020) Multi-scale domain-adversarial multiple-instance CNN for cancer subtype classification with unannotated histopathological images	Rongjun Tang
2021/9/15	1. (CVPR2020)What Makes Training Multi-modal Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned transformations for one-shot medical image segmentation	Lufei Gao
	1. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising	Luyue Shi
2021/9/22	1. (TNNLS 2020) A survey on explainable artificial intelligence (xai): Toward medical xai 2. (CVPR 2017) Mdnet: A semantically and visually interpretable medical image diagnosis network	Lei Liu
	1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation	Yujin Tang
2021/9/29	1. (CVPR2021) 3D Graph Anatomy Geometry-Integrated Network for Pancreatic Mass Segmentation, Diagnosis, and Quantitative Patient Management 2. (Miccai2020) Voxel2Mesh: 3D Mesh Model Generation from Volumetric Data	Yicheng Jiang
	1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation	Yaoluo Kang
2021/10/06	国庆节	

2021/10/13	<ol style="list-style-type: none"> 1. (CVPR2020) FocalMix: Semi-Supervised Learning for 3D Medical Image Detection 2. (CVPR2021) Instant-Teaching: An End-to-End Semi-Supervised Object Detection Framework 	Congjie Ye
	<ol style="list-style-type: none"> 1. (MICCAI2021) CoTr: Efficiently Bridging CNN and Transformer for 3D Medical Image Segmentation 2. (MICCAI2021) MIL-VT: Multiple Instance Learning Enhanced Vision Transformer for Fundus Image Classification 	Wei Lou
2021/10/20		Wentao Lei
	<ol style="list-style-type: none"> 1. Batch Normalization Increases Adversarial Vulnerability and Decreases Adversarial Transferability: A Non-Robust Feature Perspective 	Rongjun Tang
2021/10/27		
2021/11/3	<ol style="list-style-type: none"> 1. (MICCAI2019) Uncertainty-Aware Self-ensembling Model for Semi-supervised 3D Left Atrium Segmentation 2. (MICCAI2020) Shape-Aware Semi-supervised 3D Semantic Segmentation for Medical Images 	Huansen Chen
	<ol style="list-style-type: none"> 1. (CVPR2021) FSDR: Frequency Space Domain Randomization for Domain Generalization 2. (CVPR2021) A Fourier-based Framework for Domain Generalization 	Luyue Shi
2021/11/10	<ol style="list-style-type: none"> 1. (MICCAI 2021) Self-Supervised Longitudinal Neighbourhood Embedding 2. (MICCAI 2021) Contrastive Learning with Continuous Proxy Meta-Data for 3D MRI Classification 	Luoyao Kang
	<ol style="list-style-type: none"> 1. (MICCAI2021) Early Detection of Liver Fibrosis Using Graph Convolutional Networks. 2. (MICCAI2021) Focusing on Clinically Interpretable Features: Selective Attention Regularization for Liver Biopsy Image Classification 	Lufei Gao
2021/11/17	CVPR_deadline	

2021/11/24	<ol style="list-style-type: none"> 1. (TMI 2021.oct)A Unified Framework for Generalized Low-Shot Medical Image Segmentation with Scarce Data 2. (CVPR2019) RepMet: Representative-based metric learning for classification and one-shot object detection 	Yicheng Jiang
	<ol style="list-style-type: none"> 1. (CVPR2021)SetMargin Loss applied to Deep Keystroke Biometrics with Circle Packing Interpretation 2. (CVPR2021)Triplet Contrastive Learning for Brain Tumor Classification 	Yiming Ouyang
2021/12/1	<ol style="list-style-type: none"> 1. (MICCAI2021) TransFuse: Fusing Transformers and CNNs for Medical Image Segmentation 2. (ICCV2021) Fast Convergence of DETR with Spatially Modulated Co-Attention 	Wei Lou
	<ol style="list-style-type: none"> 1. (NIPS2021): FlexMatch: Boosting Semi-Supervised Learning with Curriculum Pseudo Labeling 2. (CVPR2020): FocalMix: Semi-Supervised Learning for 3D Medical Image Detection 	Wentao Lei
2021/12/8	<ol style="list-style-type: none"> 1. (NIPS2021) Adversarial Neuron Pruning Purifies Backdoored Deep Models 	Rongjun Tang
	<ol style="list-style-type: none"> 1. (MICCAI2021) Multi-compound Transformer for Accurate Biomedical Image Segmentation 2. (MICCAI2021) Spine-Transformers: Vertebra Detection and Localization in Arbitrary Field-of-View Spine CT with Transformers 	Yujin Tang
2021/12/15	<ol style="list-style-type: none"> 1. (ICLR2020) MUTUAL MEAN-TEACHING: PSEUDO LABEL REFINERY FOR UNSUPERVISED DOMAIN ADAPTATION ON PERSON REIDENTIFICATION 2. (CVPR2021) CReST: A Class-Rebalancing Self-Training Framework for Imbalanced Semi-Supervised Learning 	Huansen Chen
	<ol style="list-style-type: none"> 1. (MICCAI 2021)Longitudinal Self-supervision to Disentangle Inter-patient Variability from Disease Progression 2. (TMI 2021)Dual Attention Multi-Instance Deep Learning for Alzheimer's Disease Diagnosis With Structural MRI 	Luoyao Kang
2021/12/22	<ol style="list-style-type: none"> 1. (NeurIPS2020)RANet: Region Attention Network for Semantic Segmentation 2. (CVPR2021)Learning to Recommend Frame for Interactive Video Object Segmentation in the Wild 	Lei Liu

2022/12/29	1. (NIPS2021) Nagrani, A., Yang, S., Arnab, A., Jansen, A., Schmid, C., & Sun, C. (2021). Attention bottlenecks for multimodal fusion. Advances in Neural Information Processing Systems, 34.	Lufei Gao
	1. (MICCAI2021) Positional Contrastive Learning for Volumetric Medical Image Segmentation 2. (MICCAI2021) Semi-supervised Contrastive Learning for Label-efficient Medical Image Segmentation	Yiming Ouyang
2022/1/5	1. (MICCAI2021) Intranofality Domain Adaptation Using Self Ensembling and Adversarial Training 2. (MICCAI2021) Semantic Consistent Unsupervised Domain Adaption for Cross-modality Medical Image Segmentayion	Congjie Ye
	1. (MICCAI2021) Improving Pneumonia Localization via Cross-Attention on Medical Images and Reports	Yicheng Jiang
2022/1/12	1. (MICCAI2021) Modality-aware Mutual Learning for Multi-modal Medical Image Segmentation 2. (AAAI2021) Semi-supervised Medical Image Segmentation through Dual-task Consistency	Wei Lou
	1. (CVPR2021) Every Annotation Counts: Multi-label Deep Supervision for Medical Image Segmentation 2. (CVPR2021) cDice - a Novel Topology-Preserving Loss Function for Tubular Structure Seg	Wentao Lei
2022/1/19	1. (PR2020) Deep Co-Training for Semi-Supervised Image Segmentation	Huansen Chen
	1. (ICCV2021)CrossViT: Cross-Attention Multi-Scale Vision Transformer for Image Classification 2. (MICCAI2021)Combining 3D Image and Tabular Data via the Dynamic Affiffiffine Feature Map Transform	Chenyu Liu
2022/1/26		Rongjun Tang
	1. (MICCAI2021) RibSeg Dataset and Strong Point Cloud Baselines for Rib Segmentation from CT Scans 2. (MLMI2021)Rethinking Pulmonary Nodule Detection in Multi-view 3D CT Point Cloud Representation	Yujin Tang
2022/2/16		Luoyao Kang

2022/2/18		Luyue Shi
2022/2/23		Congjie Ye
		Lufei Gao
公开资料	https://github.com/cmwang-sribd-2020/cuhksz-medical-vision-seminar-2021-Journal-Club	