2021-2022 Medical Vision Seminar

Week	Paper Title	Reporter
2021/6/30	 (CVPR20) Structure Boundary Preserving Segmentation for Medical Image with Ambiguous Boundary (CVPR21) DoDNet: Learning to segment multi-organ and tumors from multiple partially labeled datasets 	Luyue Shi
	 (CVPR20) Augmenting Colonoscopy using Extended and Directional CycleGAN for Lossy Image Translation (CVPR21) Multi-institutional Collaborations for Improving Deep Learning-based Magnetic Resonance Image Reconstruction Using Federated Learning 	Haoyu Chen
2021/7/7	 (CVPR2021) XProtoNet: Diagnosis in Chest Radiography with Global and Local Explanations (ISBI2021) Geometric Loss for Deep Multiple Sclerosis Lesion Segmentation 	Lufei Gao
	 (CVPR2021) DARCNN: Deomain Adaptive Region-based Convolutional Neural Network for Unsupervised Instance Segmentation in Biomedical Images (ISBI2021) Towards Unbiased Covid-19 Lesion Localisation and Segmentation Via Weakly Supervised Learning 	Jinyue Cai
2021/7/14	 (CVPR2021) Learning Calibrated Medical Image Segmentation via Multi-Rater Agreement Modeling (MICCAI2021) QUBIQ Challenge 	Yicheng Jiang
	(CVPR2021) Group-Free 3D Object Detection via Transformers (MICCAI2021) Medical Transformer: Gated Axial- Attention for Medical Image Segmentation	Congjie Ye
2021/7/21		Wentao Lei
	(CVPR2021) DiNTS: Differentiable Neural Network Topology Search for 3D Medical Image Segmentation	Wei Lou
2021/7/20	 Disabling Backdoor and Identifying Poison Data by using Knowledge Distillation in Backdoor Attacks on Deep Neural Networks Neural Attention Distillation: Erasing Backdoor Triggers from Deep Neural Networks 	Rongjun Tang

	 (CVPR2021) FedDG: Federated Domain Generalization on Medical Image Segmentation via Episodic Learning in Continuous Frequency Space (ISBI2020)ASCNet: Adaptive-Scale Convolutional Neural Networks for Multi-Scale Feature Learning 	Yujin Tang
	 (NeurIPS2020) Is normalization indispensable for training deep neural network? (ISBI2020) Class-Center Involved Triplet Loss for Skin Disease Classification on Imbalanced Data 	Lei Liu
2021/8/4	 (ISBI) WEAKLY SUPERVISED PROSTATE TMA CLASSIFICATION VIA GRAPH CONVOLUTIONAL NETWORKS (ISBI2020) WEAKLY-SUPERVISED BRAIN TUMOR CLASSIFICATION WITH GLOBAL DIAGNOSIS LABEL 	Wentao Lei
2021/8/11	 (Arxiv 2021.06) Medical Transformer: Universal Brain Encoder for 3D MRI Analysis (Arxiv 2021.04) Emerging Properties in Self-Supervised Vision Transformers 	Congjie Ye
2021/8/11	 (MICCAI2020) Meta Corrupted Pixels Mining for Medical Image Segmentation (MICCAI2021) Distilling effective supervision for robust medical image segmentation with noisy labels 	Luyue Shi
2021/8/18	 (NIPS 2020) Contrastive learning of global and local features for medical image segmentation with limited annotations (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	 (CVPR2020) MMTM: Multimodal Transfer Module for CNN Fusion (AAAI2021) SMIL: Multimodal Learning with Severely Missing Modality 	Lufei Gao
	 (ICLR2019) Uncertainty-guided Continual Learning with Bayesian Neural Networks (PNAS2017) Overcoming catastrophic forgetting in neural networks. 	Lei Liu

1. (CVPR2020) FocalMix: Semi-Supervised Learning for 3D Medical Image Detection 2. (ICCV2017) Focal Loss for Dense Object Detection 2. (ICCV2017) Focal Loss for Dense Object Detection 3. (IVPS2020) Rethinking Pre-training and Self-training 2. (CVPR2020) Deep Distance Transform for Tubular Structure Segmentation in CT Seans 3. (IVPS2018) Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs 2. (ICLR2017) SNAPSHOT ENSEMBLES: TRAIN 1, GET M FOR FREE 1. (CVPR 2020) Multi-scale domain-adversarial multiple-instance CNN for cancer subtype classification with unannotated histopathological images 3. (CVPR2019) Math Makes Training Multi-modal Classification Networks Hard? 2. (CVPR2019) Data augmentation using learned transformations for one-shot medical image segmentation 4. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 4. (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 4. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 2. (Miccai2020) Voxel2Mesh: 3D Mesh Model Generation from Volumetric Data 3. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation 4. (Arxiv 21.06) Per-Pixel Classification 4. (Arxiv 21.06) Per-Pixel Classification 4. (Arxiv 21.06) Per-Pixel Classification 4			
1. (NIPS2020) Rethinking Pre-training and Self-training 2. (CVPR2020) Deep Distance Transform for Tubular Structure Segmentation in CT Scans 1. (NIPS2018) Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs 2. (ICLR2017) SNAPSHOT ENSEMBLES: TRAIN 1, GET M FOR FREE 1. (CVPR 2020) Multi-scale domain-adversarial multiple-instance CNN for cancer subtype classification with unannotated histopathological images 1. (CVPR2020)What Makes Training Multi-modal Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned transformations for one-shot medical image segmentation 1. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 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 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) mnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation Yaoluo Kang	2021/9/8	Medical Image Detection	Yicheng Jiang
2021/9/8 Ensembling of DNNs 2. (ICLR2017) SNAPSHOT ENSEMBLES: TRAIN 1, GET M FOR FREE 1. (CVPR 2020) Multi-scale domain-adversarial multiple-instance CNN for cancer subtype classification with unannotated histopathological images 1. (CVPR2020)What Makes Training Multi-modal Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned transformations for one-shot medical image segmentation 1. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 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 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation		2. (CVPR2020) Deep Distance Transform for Tubular Structure	Wei Lou
instance CNN for cancer subtype classification with unannotated histopathological images 1. (CVPR2020)What Makes Training Multi-modal Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned transformations for one-shot medical image segmentation 1. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 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 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation		Ensembling of DNNs 2. (ICLR2017) SNAPSHOT ENSEMBLES: TRAIN 1, GET M	Wentao Lei
2021/9/15 Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned transformations for one-shot medical image segmentation 1. (CVPR2019) Noise2Void - Learning Denoising From Single Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 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 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation		instance CNN for cancer subtype classification with	Rongjun Tang
Noisy Images 2. (ECCV2020) Unpaired Learning of Deep Image Denoising 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 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation		Classification Networks Hard? 2. (CVPR2019)Data augmentation using learned	Lufei Gao
2021/9/22 (xai): Toward medical xai (CVPR 2017) Mdnet: A semantically and visually interpretable medical image diagnosis network 1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation Yujin Tang Yujin Tang Yicheng Jiang		Noisy Images	Luyue Shi
1. (Arxiv 21.03) Swin transformer: Hierarchical vision transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for Volumetric Segmentation 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 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation Yujin Tang Yujin Tang Yicheng Jiang		(xai): Toward medical xai(CVPR 2017) Mdnet: A semantically and visually	Lei Liu
Network for Pancreatic Mass Segmentation, Diagnosis, and Quantitative Patient Management 2. (Miccai2020) Voxel2Mesh: 3D Mesh Model Generation from Volumetric Data 1. (Arxiv 21.06) Per-Pixel Classification is Not All You Need for Semantic Segmentation Yicheng Jiang Yaoluo Kang		transformer using shifted windows 2. (Arxiv 21.09) nnFormer: Interleaved Transformer for	Yujin Tang
for Semantic Segmentation		Network for Pancreatic Mass Segmentation, Diagnosis, and Quantitative Patient Management 2. (Miccai2020) Voxel2Mesh: 3D Mesh Model Generation	Yicheng Jiang
2021/10/06 国庆节			Yaoluo Kang
<u> </u>	2021/10/06	国庆节	

	 (CVPR2020) FocalMix: Semi-Supervised Learning for 3D Medical Image Detection (CVPR2021) Instant-Teaching: An End-to-End Semi-Supervised Object Detection Framework 	Congjie Ye
2021/10/13	 (MICCAI2021) CoTr: Efficiently Bridging CNN and Transformer for 3D Medical Image Segmentation (MICCAI2021) MIL-VT: Multiple Instance Learning Enhanced Vision Transformer for Fundus Image Classification 	Wei Lou
		Wentao Lei
2021/10/20	Batch Normalization Increases Adversarial Vulnerability and Decreases Adversarial Transferability: A Non-Robust Feature Perspective	Rongjun Tang
2021/10/27		
	 (MICCAI2019) Uncertainty-Aware Self-ensembling Model for Semi-supervised 3D Left Atrium Segmentation (MICCAI2020) Shape-Aware Semi-supervised 3D Semantic Segmentation for Medical Images 	Huansen Chen
2021/11/3	 (CVPR2021) FSDR: Frequency Space Domain Randomization for Domain Generalization (CVPR2021) A Fourier-based Framework for Domain Generalization 	Luyue Shi
	 (MICCAI 2021) Self-Supervised Longitudinal Neighbourhood Embedding (MICCAI 2021) Contrastive Learning with Continuous Proxy Meta-Data for 3D MRI Classification 	Luoyao Kang
2021/11/10	 (MICCAI2021) Early Detection of Liver Fibrosis Using Graph Convolutional Networks. (MICCAI2021) Focusing on Clinically Interpretable Features: Selective Attention Regularization for Liver Biopsy Image Classification 	Lufei Gao
2021/11/17	CVPR_deadline	

2021/11/24	 (TMI 2021.oct)A Unified Framework for Generalized Low- Shot Medical Image Segmentation with Scarce Data (CVPR2019) RepMet: Representative-based metric learning for classification and one-shot object detection 	Yicheng Jiang
	 (CVPR2021)SetMargin Loss applied to Deep Keystroke Biometrics with Circle Packing Interpretation (CVPR2021)Triplet Contrastive Learning for Brain Tumor Classification 	Yiming Ouyang
2021/12/1	 (MICCAI2021) TransFuse: Fusing Transformers and CNNs forMedical Image Segmentation (ICCV2021) Fast Convergence of DETR with Spatially Modulated Co-Attention 	Wei Lou
	 (NIPS2021): FlexMatch: Boosting Semi-Supervised Learning with Curriculum Pseudo Labeling (CVPR2020): FocalMix: Semi-Supervised Learning for 3D Medical Image Detection 	Wentao Lei
	(NIPS2021) Adversarial Neuron Pruning Purifies Backdoored Deep Models	Rongjun Tang
2021/12/8	 (MICCAI2021) Multi-compound Transformer for Accurate Biomedical Image Segmentation (MICCAI2021) Spine-Transformers: Vertebra Detection and Localization in Arbitrary Field-of-View Spine CT with Transformers 	Yujin Tang
2021/12/15	1. (ICLR2020) MUTUAL MEAN-TEACHING: PSEUDO LABEL REFINERY FOR UNSUPERVISED DOMAIN ADAPTATION ON PERSON RE-IDENTIFICATION	Huansen Chen
	 (MICCAI 2021)Longitudinal Self-supervision to Disentangle Inter-patient Variability from Disease Progression (TMI 2021)Dual Attention Multi-Instance Deep Learning for Alzheimer's Disease Diagnosis With Structural MRI 	Luoyao Kang
2021/12/22		Lufei Gao
		Yicheng Jiang
		Lei Liu

2022/12/29		Yiming Ouyang
2022/1/5		Congjie Ye
		Youlong Ding
2022/1/12		Wei Lou
		Zhuo Chen
2022/1/19		Wentao Lei
2022/1/19		Chenyu Liu
2022/1/26		Rongjun Tang
		Yujin Tang
2022/2/16		Huansen Chen
		Luyue Shi
2022/2/23		Luoyao Kang
		Lufei Gao
公开资料	https://github.com/cmwang-sribd-2020/cuhksz-medical-vision- seminar-2021-Journal-Club	