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			
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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
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for Semantic Segmentation	2021/9/29	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
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	 (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	 (ICLR2020) MUTUAL MEAN-TEACHING: PSEUDO LABEL REFINERY FOR UNSUPERVISED DOMAIN ADAPTATION ON PERSON REIDENTIFICATIO (CVPR2021) CReST: A Class-Rebalancing Self-Training Framework for Imbalanced Semi-Supervised Learning 	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	 (NeurIPS2020)RANet: Region Attention Network for Semantic Segmentation (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
	 (MICCAI2021) Positional Contrastive Learning for Volumetric Medical Image Segmentation (MICCAI2021) Semi-supervised Contrastive Learning for Label-efficient Medical Image Segmentation 	Yiming Ouyang
2022/1/5	 (MICCAI2021) Intranofality Domain Adaptation Using Self Ensembling and Adversarial Training (MICCAI2021) Semantic Consistent Unsupervised Domain Adaption for Cross-modality Medical Image Segmentayion 	Congjie Ye
	Improving Pneumonia Localization via Cross-Attention on Medical Images and Reports	Yicheng Jiang
2020/4/42		Wei Lou
2022/1/12		Zhuo Chen
2022/1/19		Wentao Lei
		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	