

Seminar: Vision Systems MA-INF 4208

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1 Paper List

1. Advances in Self-Supervised Learning

- a) Feichtenhofer, Christoph, et al. *Masked Autoencoders as Spatiotemporal Learners*. ArXiv Preprint 2022. **Link**
- b) Bardes, Adrien, et al. *VICReg: Variance-Invariance-Covariance Regularization for Self-Supervised Learning*. ICLR. 2022. **Link**
- c) Feichtenhofer, Christoph, et al. *A large-scale study on unsupervised spatiotemporal representation learning*. CVPR. 2021. **Link**
- d) He, Kaiming, et al. *Masked Autoencoders are Scalable Vision Learners*. CVPR 2022. **Link**

2. Transformer-based Models in Computer Vision

- a) Meinhardt, Tim, et al. *Trackformer: Multi-object tracking with transformers*. CVPR. 2022. **Link**
- b) Strudel, Robin, et al. *Segmenter: Transformer for semantic segmentation*. CVPR. 2021. **Link**
- c) Wang, Yuqing, et al. *End-to-end video instance segmentation with transformers*. CVPR. 2021. **Link**
- d) Chen, Zhe, et al. *Vision Transformer Adapter for Dense Predictions*. ArXiv preprint. 2022. **Link**

3. Video Prediction and Decomposition

- a) Aksan, Emre, et al. *A spatio-temporal transformer for 3d human motion prediction*. 3DV, 2021. **Link**
- b) Singh, Gautam, et al. *Simple Unsupervised Object-Centric Learning for Complex and Naturalistic Videos*. NeurIPS. 2022. **Link**
- c) Creswell, Antonia, et al. *Unsupervised object-based transition models for 3d partially observable environments*. NeurIPS. 2021 **Link**
- d) Gao, Zhangyang, et al. *SimVP: Towards Simple yet Powerful Spatiotemporal Predictive Learning*. CVPR. 2022. **Link**