

Seminar: Vision Systems MA-INF 4208

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1 Paper List

1. Self-Supervised Learning

- a) Grill, Jean-Bastien, et al. *Bootstrap your own latent: A new approach to self-supervised learning*. 2020 [link](#)
- b) Zbontar, Jure, et al. *Barlow twins: Self-supervised learning via redundancy reduction*. 2021 [link](#)
- c) Chen, Xinlei, and Kaiming He. *Exploring simple siamese representation learning*. 2021. [link](#)
- d) Caron, Mathilde, et al. *Unsupervised Learning of Visual Features by Contrasting Cluster Assignments*. 2020. [link](#)

2. Advances in Neural Network Architectures

- a) Tolstikhin, Ilya, et al. *Mlp-mixer: An all-mlp architecture for vision*. 2021. [link](#)
- b) Dosovitskiy, Alexey, et al. *An image is worth 16x16 words: Transformers for image recognition at scale*. 2020. [link](#)
- c) Kolesnikov, Alexander, et al. *Big transfer (bit): General visual representation learning*. 2019. [link](#)
- d) Carion, Nicolas, et al. *End-to-end object detection with transformers*. 2020. [link](#)

3. Unsupervised Object Discovery

- a) Zhong, Zhun, et al. *Neighborhood Contrastive Learning for Novel Class Discovery*. 2021 [link](#)
- b) Vo, Huy, et al. *Toward Unsupervised, Multi-Object Discovery in Large-Scale Image Collections*. 2020 [link](#)
- c) Weng, Zhenzhen, et al. *Unsupervised Discovery of the Long-Tail in Instance Segmentation Using Hierarchical Self-Supervision*. 2021 [link](#)
- d) Xie, Jiahao, et al. *Unsupervised Object-Level Representation Learning from Scene Images*. 2021 [link](#)