Zero-shot Learning

Recognize unseen image categories without training instances

	Source domain	Target Domain
ZSL		

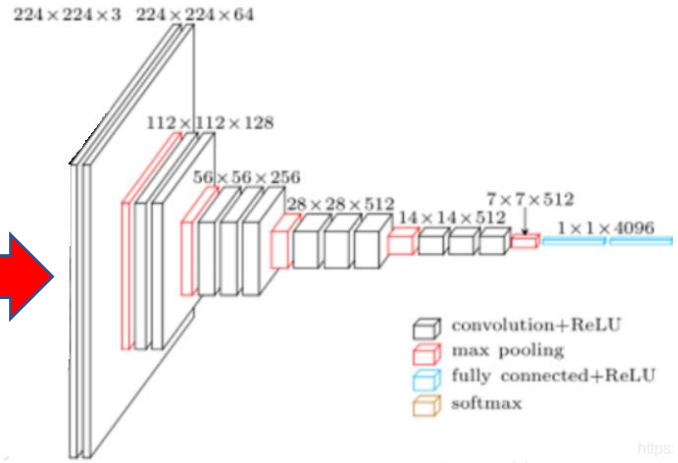
	虎	熊	马	斑马
腿	4	4	4	4
纹理	1	2	3	1
颜色	1	2	3	2

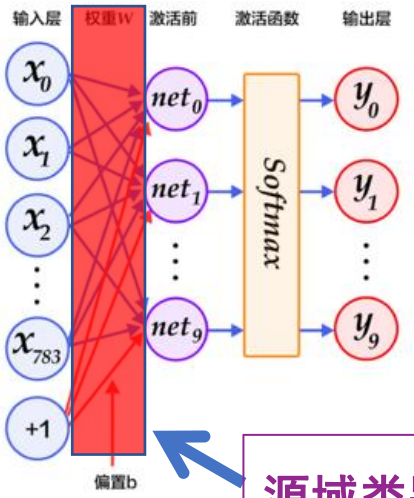
	Source domain	Target Domain
gZSL		 

Wang, et. al. 2019. A Survey of Zero-Shot Learning Settings Methods and applications.

Zero-shot Learning

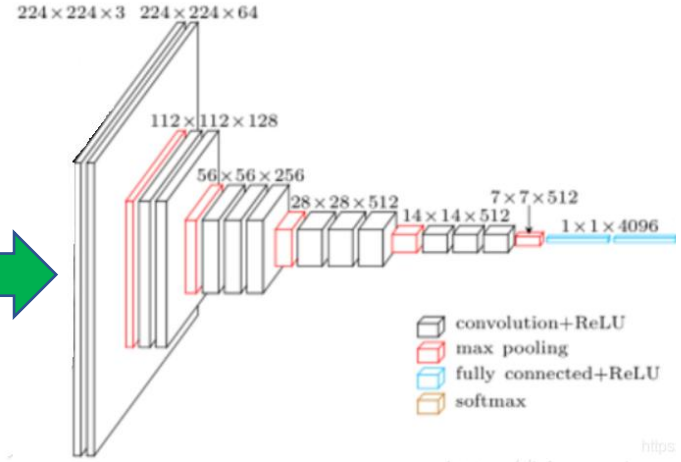
Training

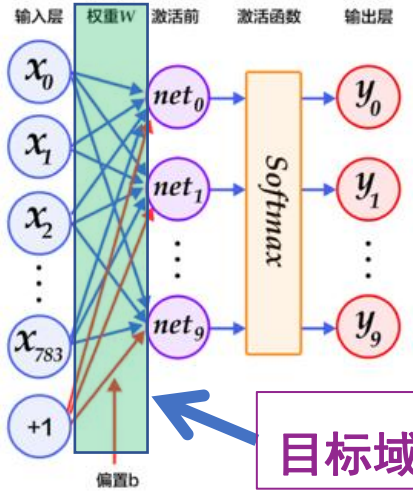




源域类别属性中心

Testing

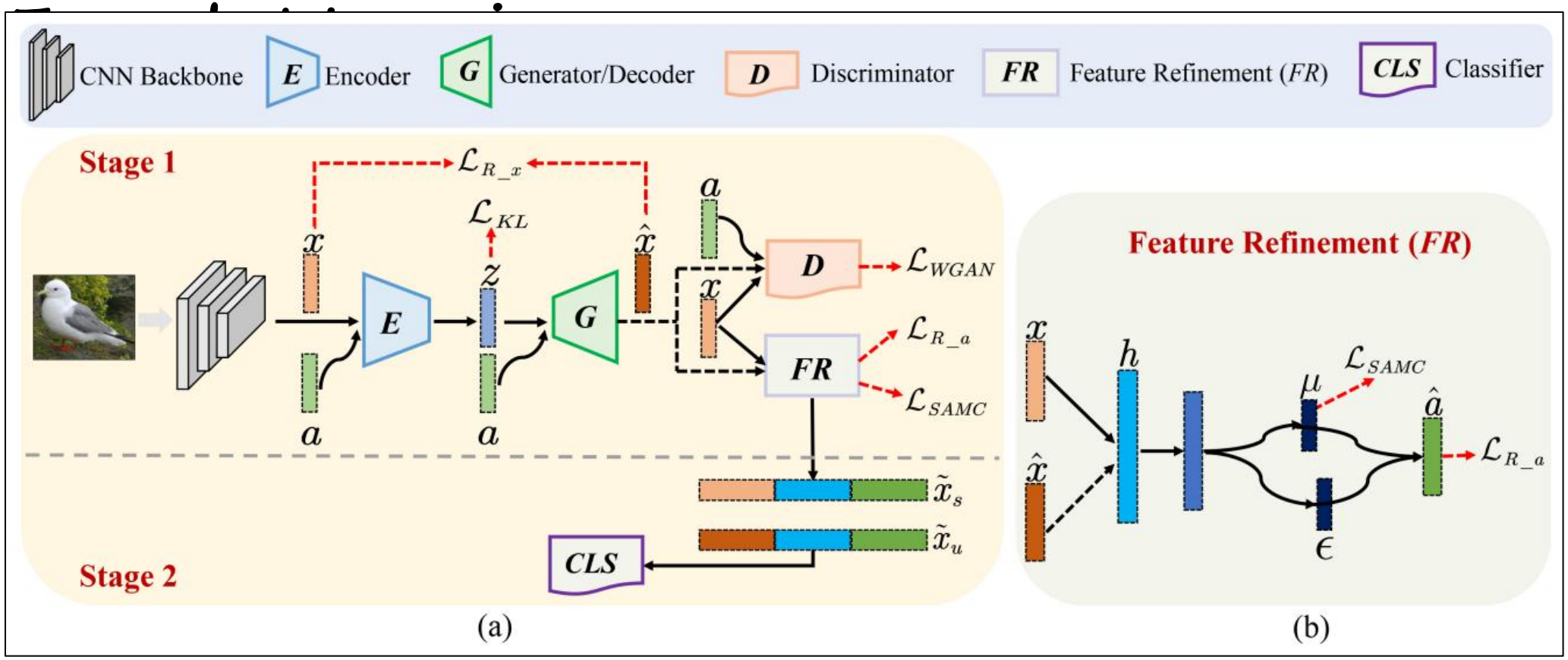




目标域类别属性中心

课题15：广义零样本学习的特征微调

ICCV 2021 FREE: Feature Refinement for Generalized



参考资料

- 论文

官方下载地址

- 代码

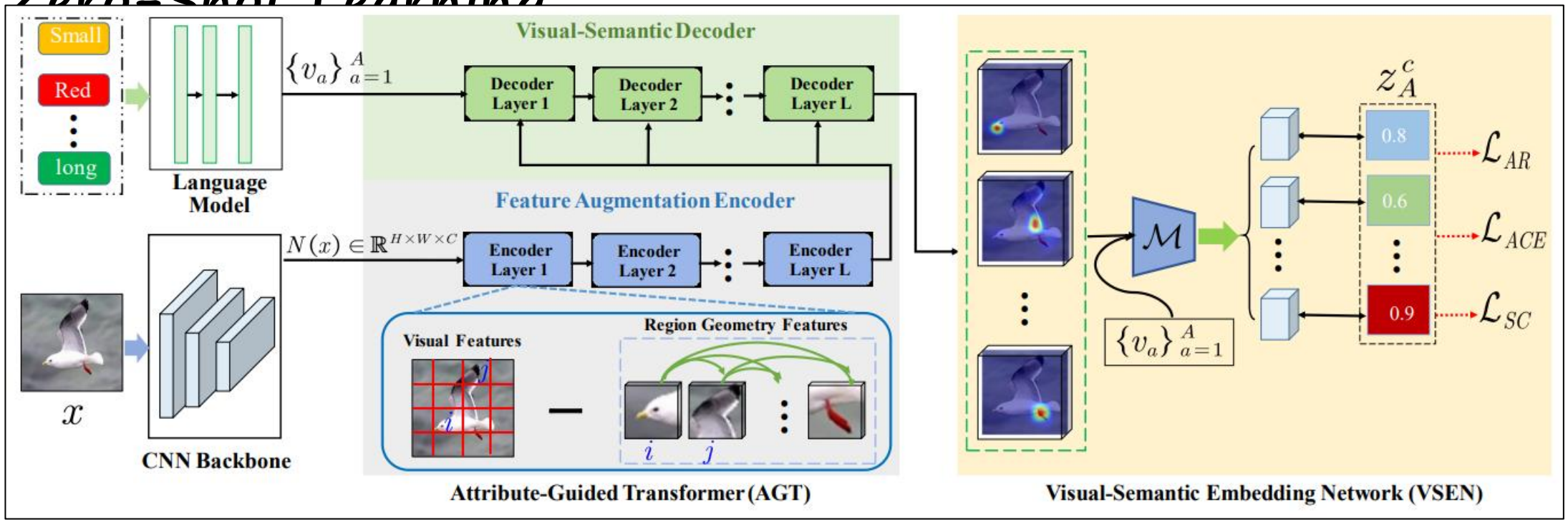
https://github.com/shiming-chen/FREE

- 博客

精读FREE: Feature Refinement for Generalized Zero-Shot Learning

课题16：零样本学习的属性引导的Transformer

AAAI22, TransZero: Attribute-guided Transformer for Zero-Shot Learning



参考资料

- 论文

arxiv下载地址

- 代码

https://github.com/shiming-chen/TransZero

- 博客

AAAI 2022 | TransZero：用于零样本学习的属性引导Transformer

要求

1. 理解 ZSL任务和论文动机

2. 理解论文方法的细节，并复现

3. 在一个数据集上实验（如CUB），分析实验结果

零样本学习参考资料

- **知乎：零次学习入门**