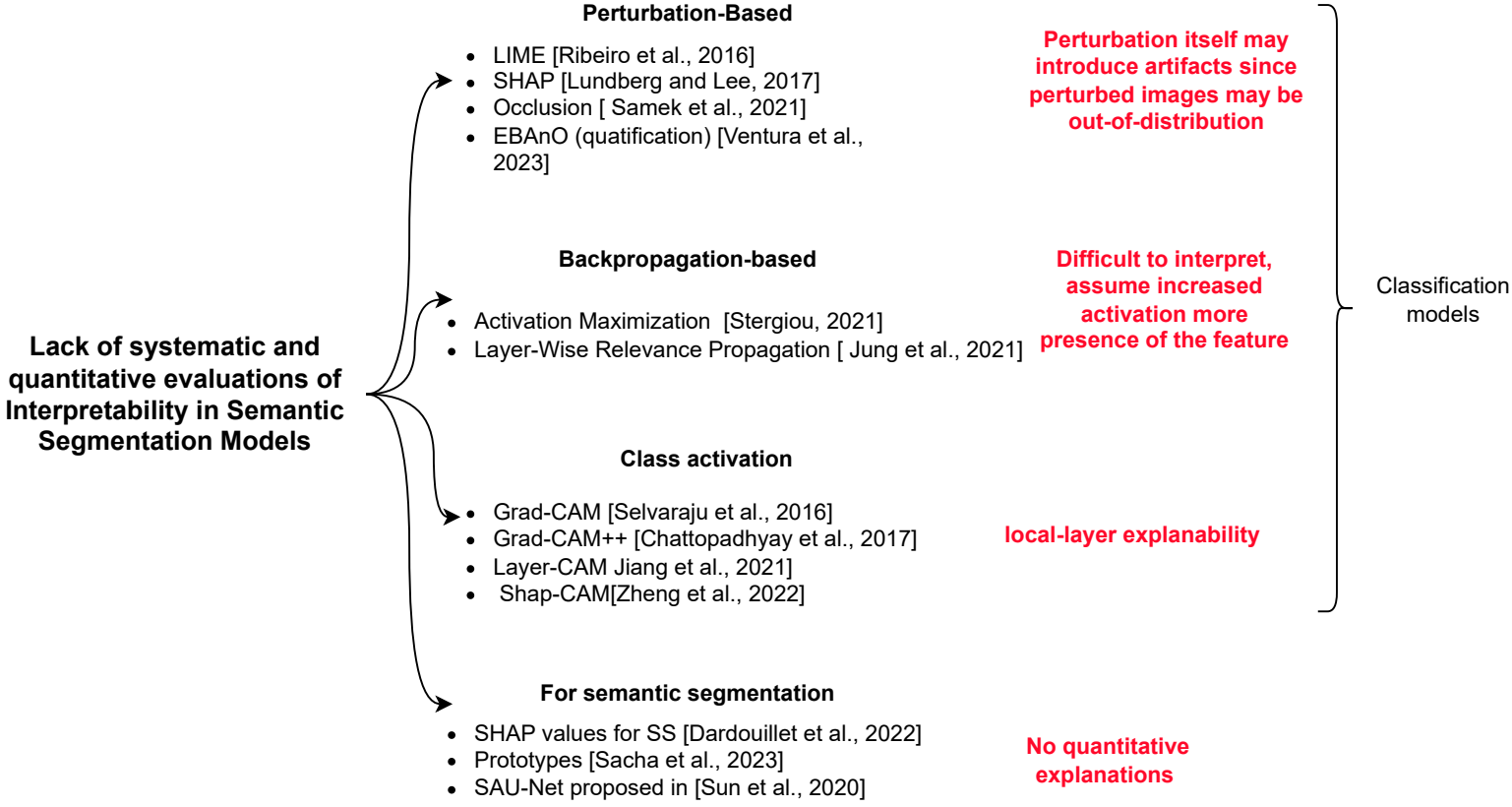
Lack of systematic and quantitative evaluations of Interpretability in Semantic Segmentation Models
Perturbation-Based
LIME [Ribeiro et al., 2016]
SHAP [Lundberg and Lee, 2017]
Occlusion [ Samek et al., 2021]
EBAnO (quatification) [Ventura et al., 2023]
Perturbation itself may introduce artifacts since perturbed images may be out-of-distribution
Backpropagation-based
Activation Maximization [Stergiou, 2021]
Layer-Wise Relevance Propagation [ Jung et al., 2021]
Difficult to interpret, assume increased activation more presence of the feature
Class activation
Grad-CAM [Selvaraju et al., 2016]
Grad-CAM++ [Chattopadhyay et al., 2017]
Layer-CAM Jiang et al., 2021]
Shap-CAM[Zheng et al., 2022]
local-layer explanability
Classification models
For semantic segmentation
SHAP values for SS [Dardouillet et al., 2022]
Prototypes [Sacha et al., 2023]
SAU-Net proposed in [Sun et al., 2020]
No quantitative explanations