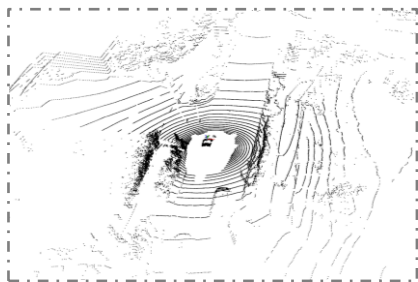


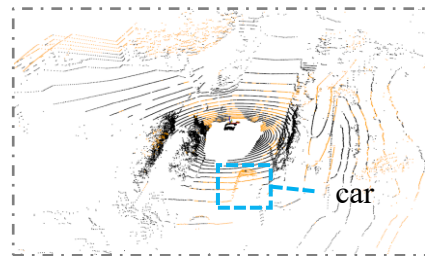
Semantic-driven Cross-modal Contrastive Learning

How CLIP benefits
3D scene
understanding?

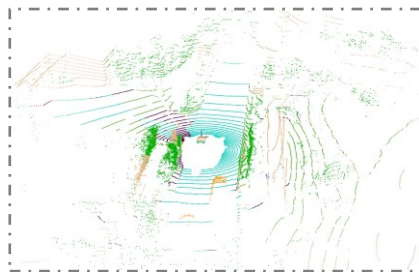


CLIP2Scene

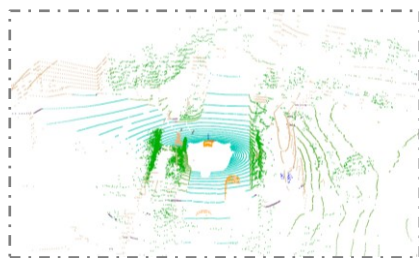
Annotation-free



1% annotation



100% annotation



CLIP

car, bus
pedestrian

Text
Encoder

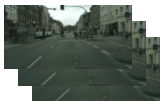


Image
Encoder

Semantic and
Spatial-Temporal
Consistency
Regularization