

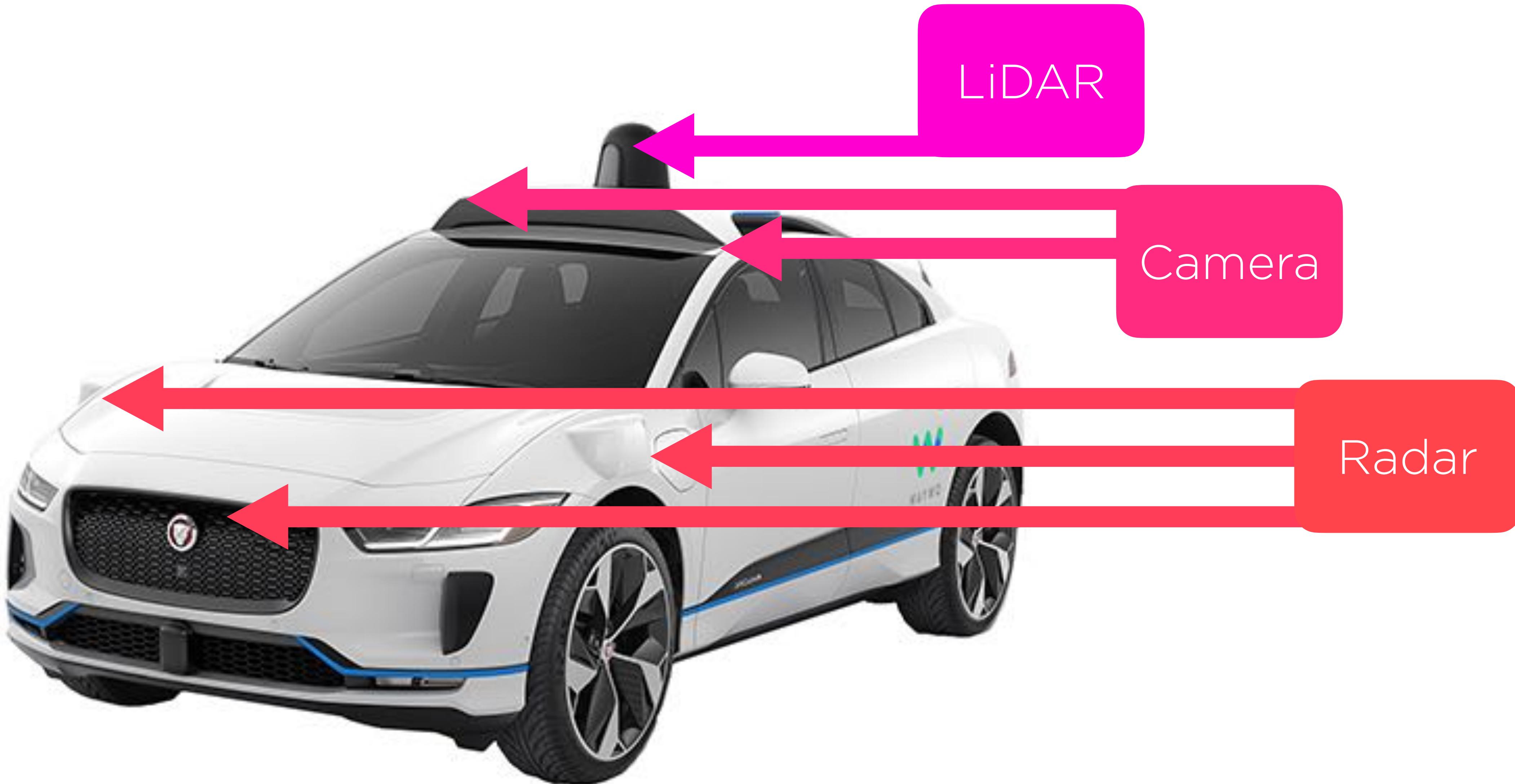
# Lidar-Net

3D Object Detection with point-cloud LiDAR for Autonomous Driving Vehicles

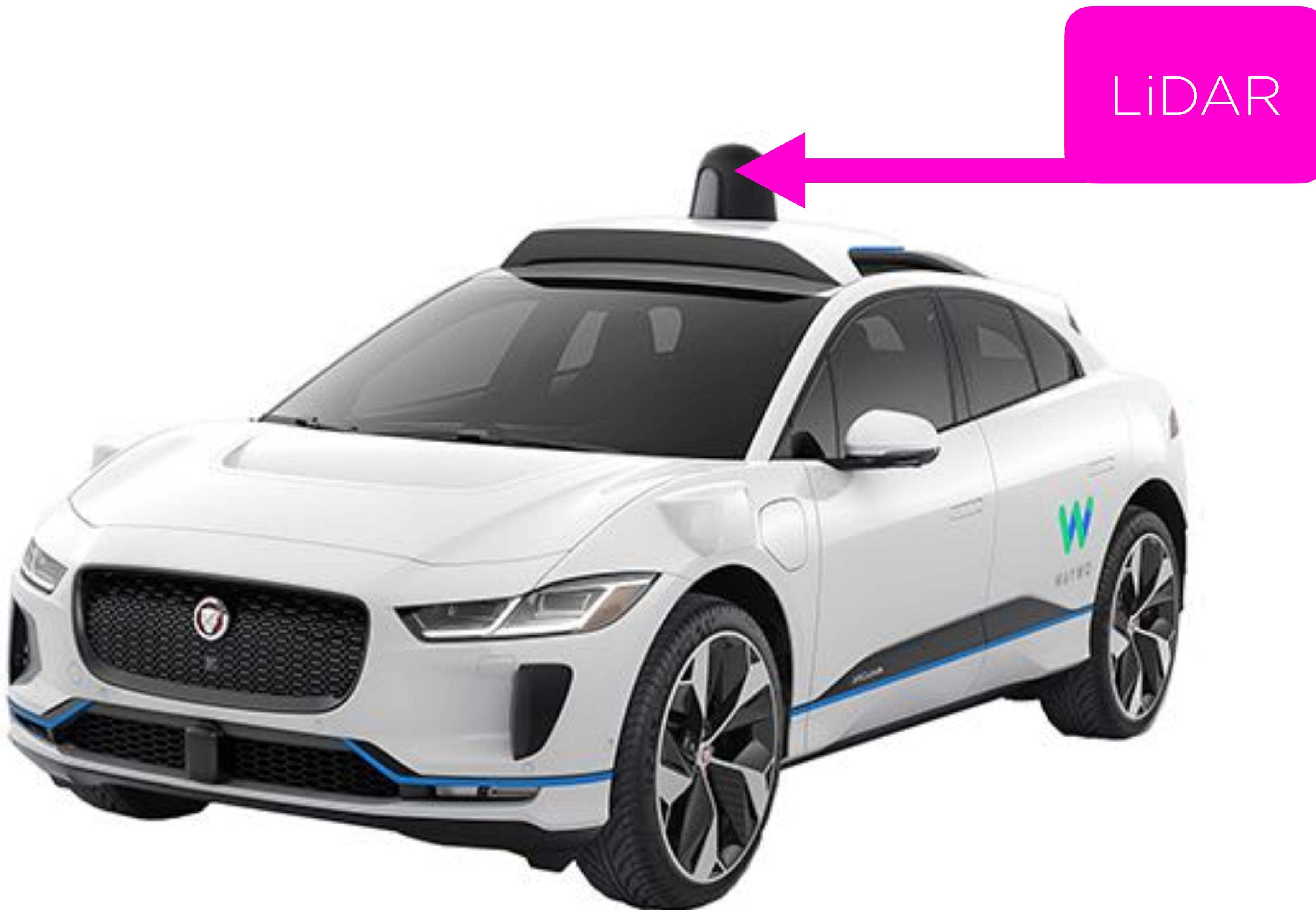


# Autonomous Vehicles

# Sensor Array

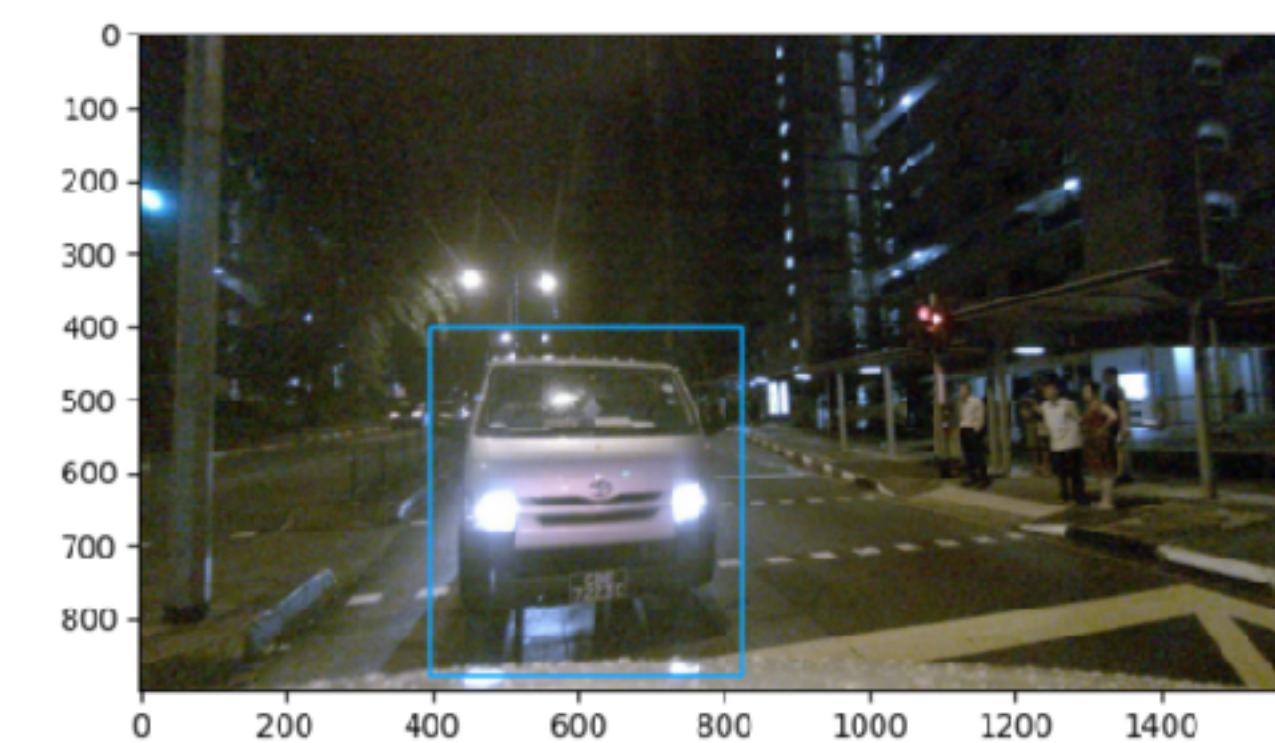
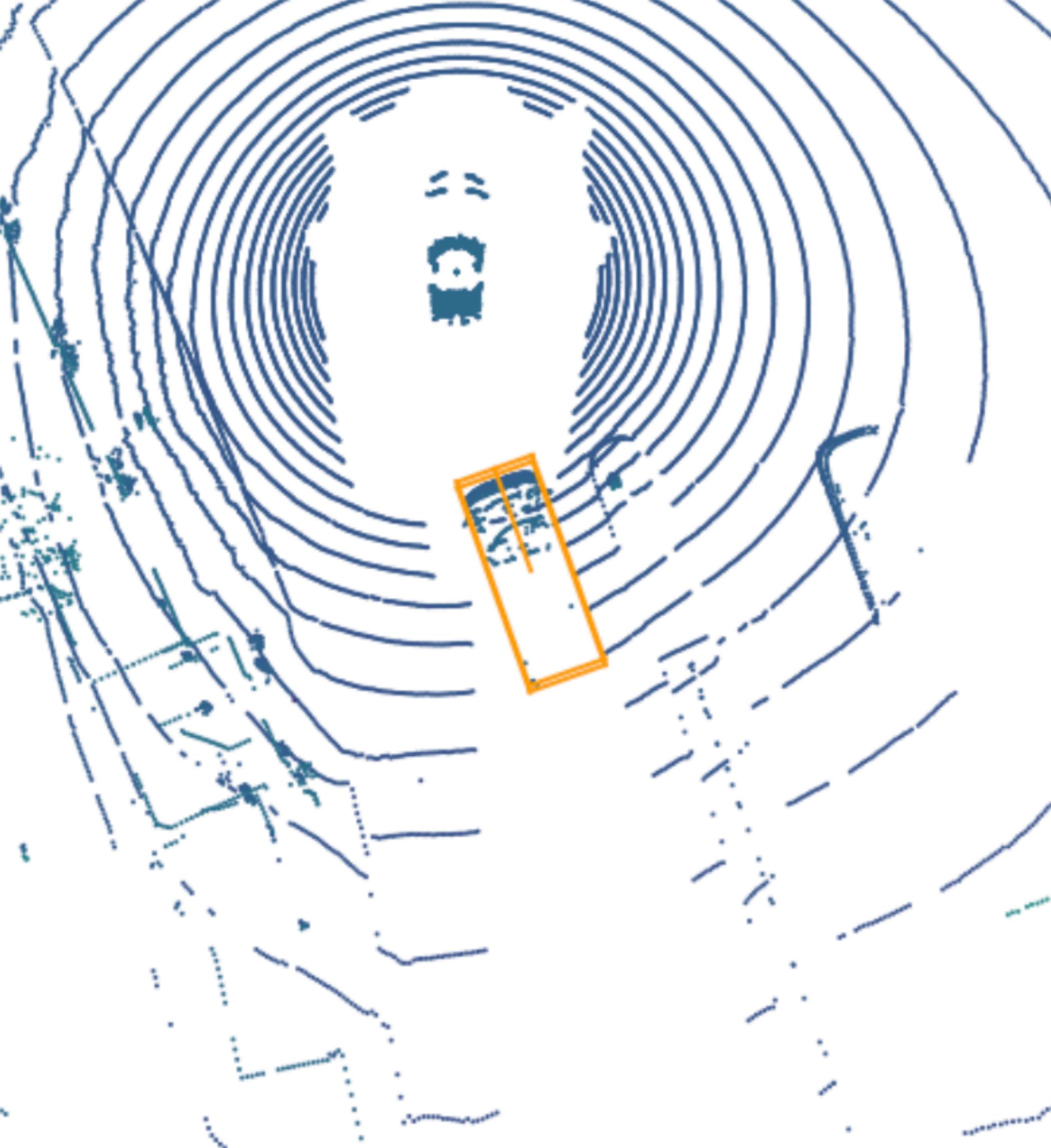


# Sensor Array

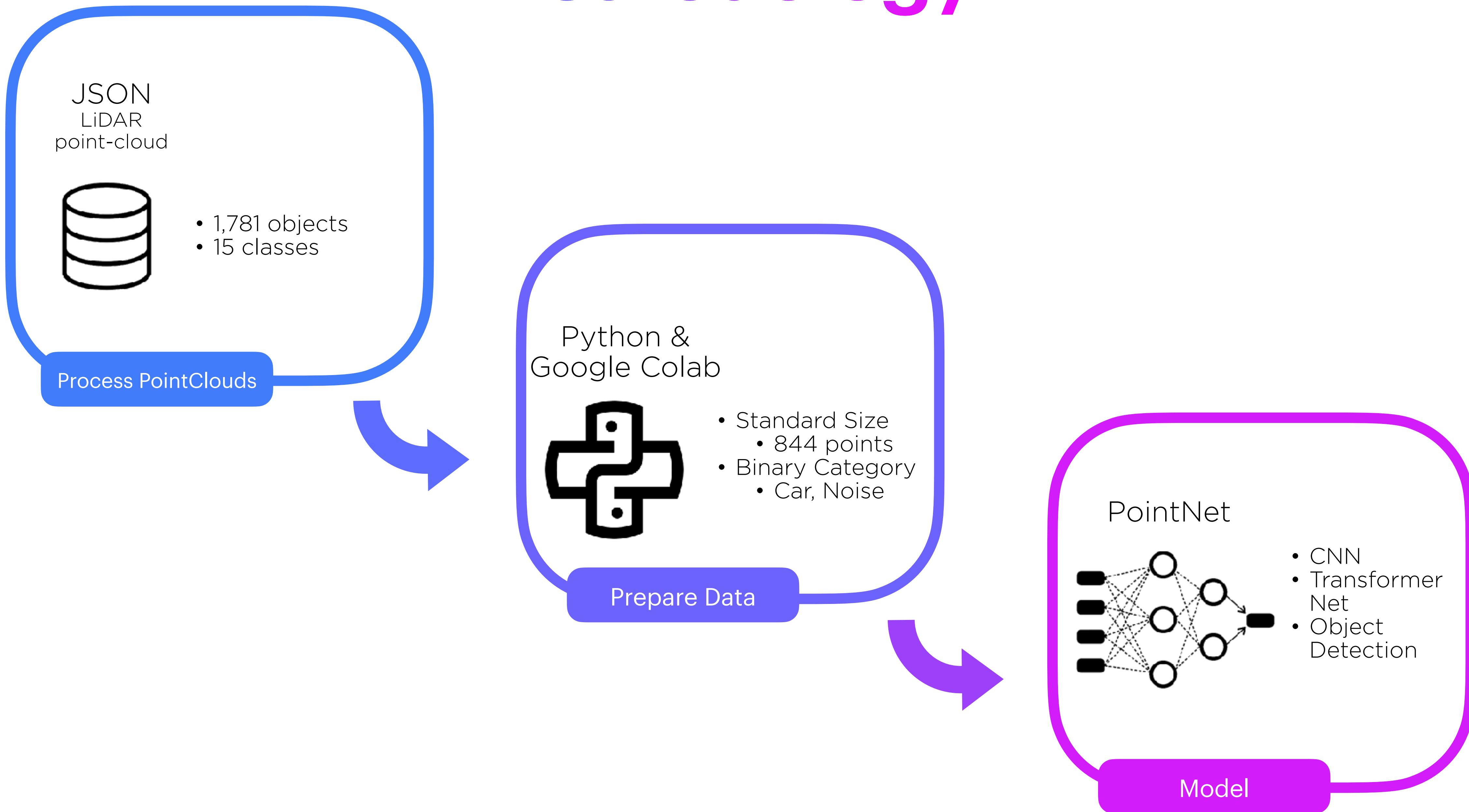


- Light Detection and Ranging
  - Remote sensing
  - Utilizes eye-safe pulsed laser to measure variable distances

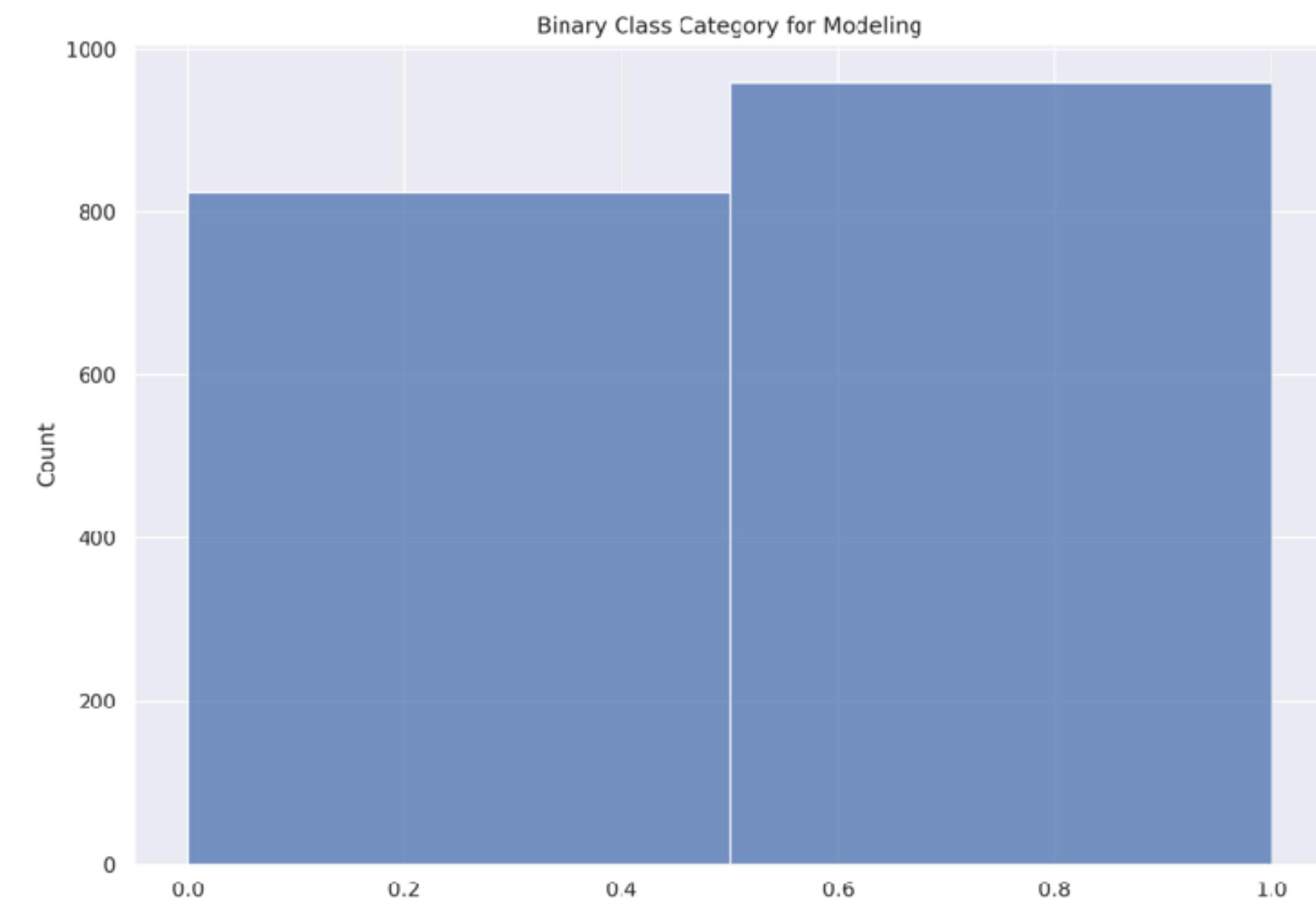
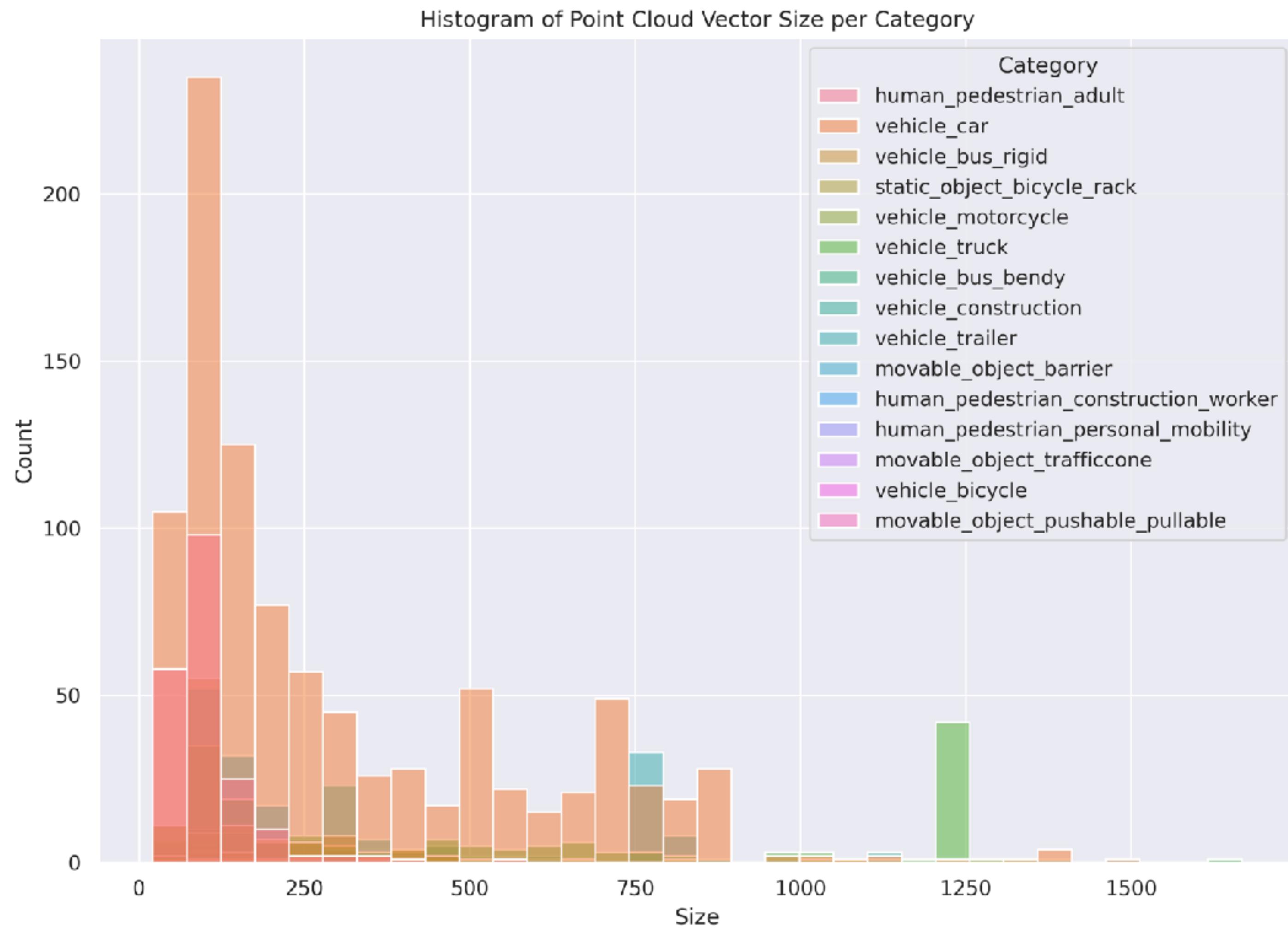
# Output



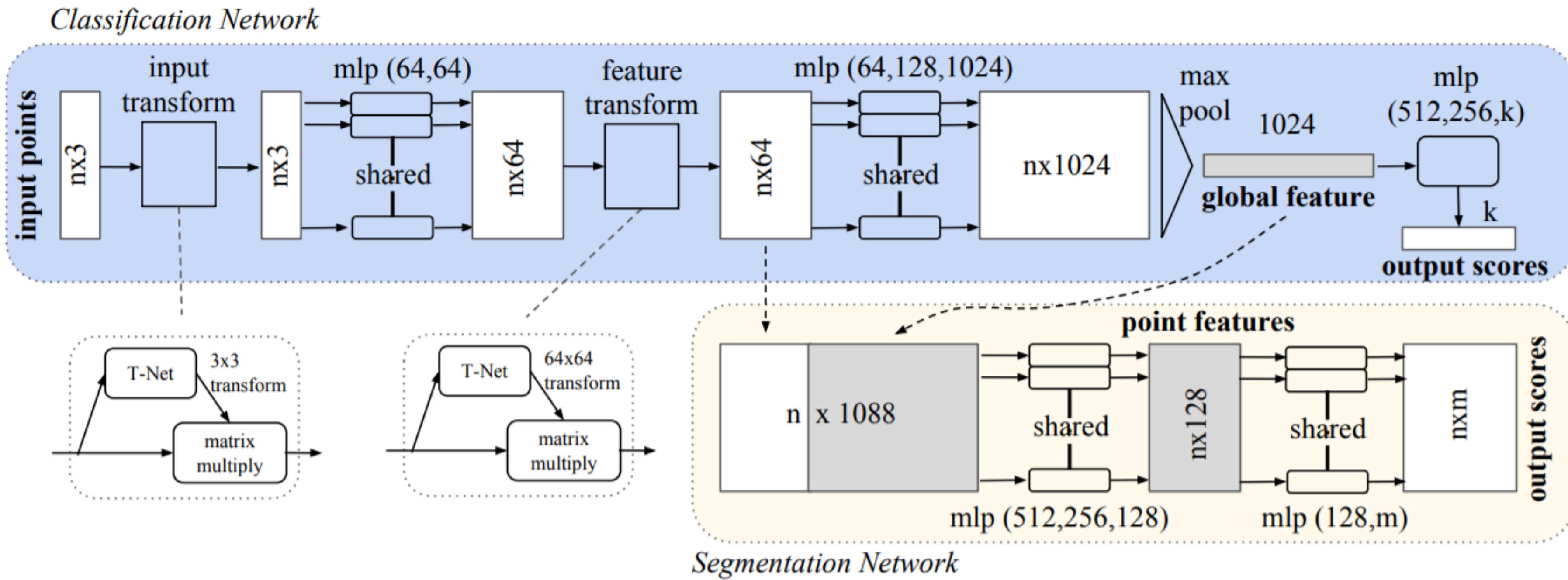
# Methodology



# Vector Size



# PointNet



- Directly consumes unordered point clouds
- Uses spatial transformer network (T-net)

# Model Performance

- Accuracy: 80.6% / 78.9%
- AUC: 88.6 / 86.5

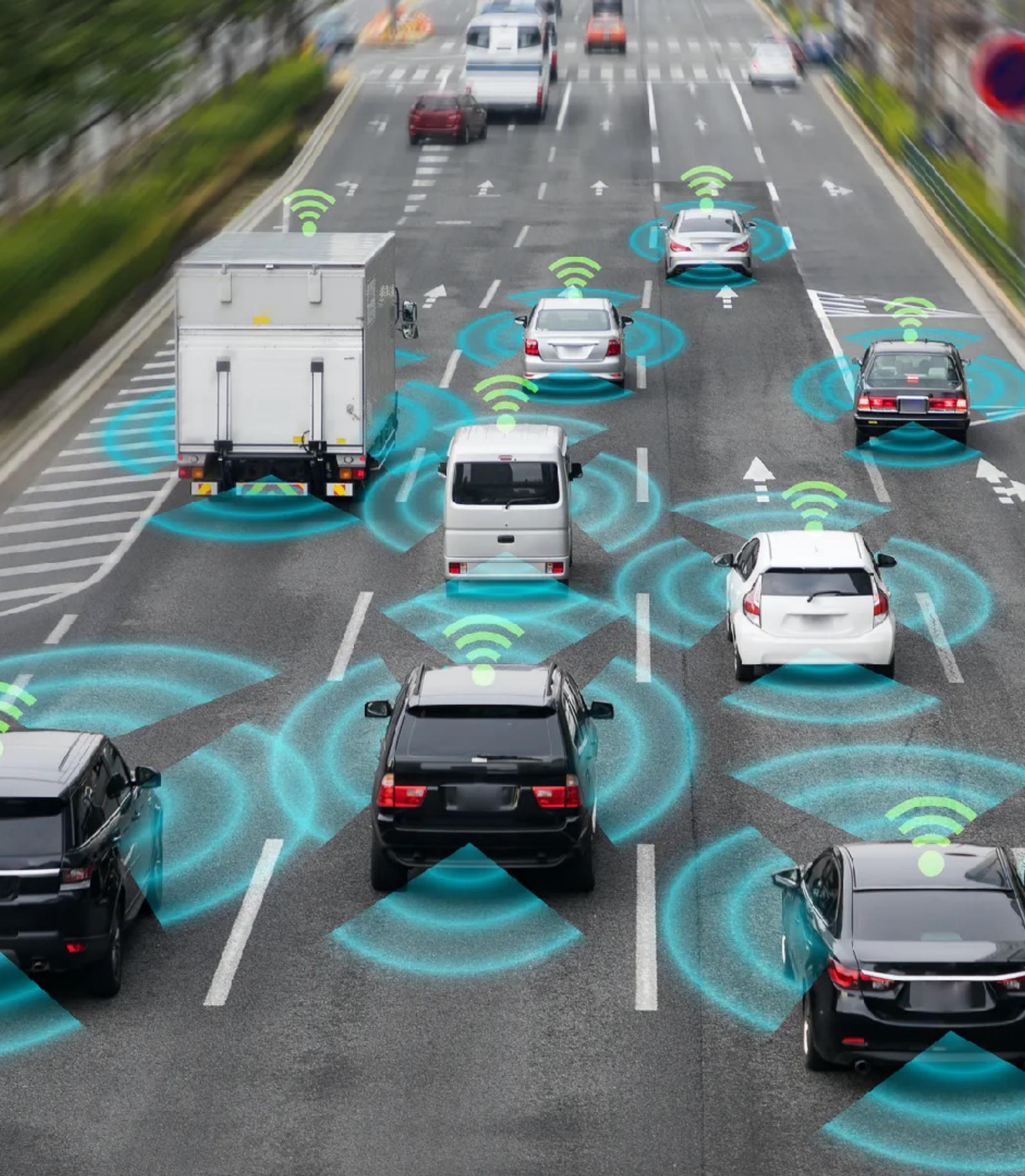


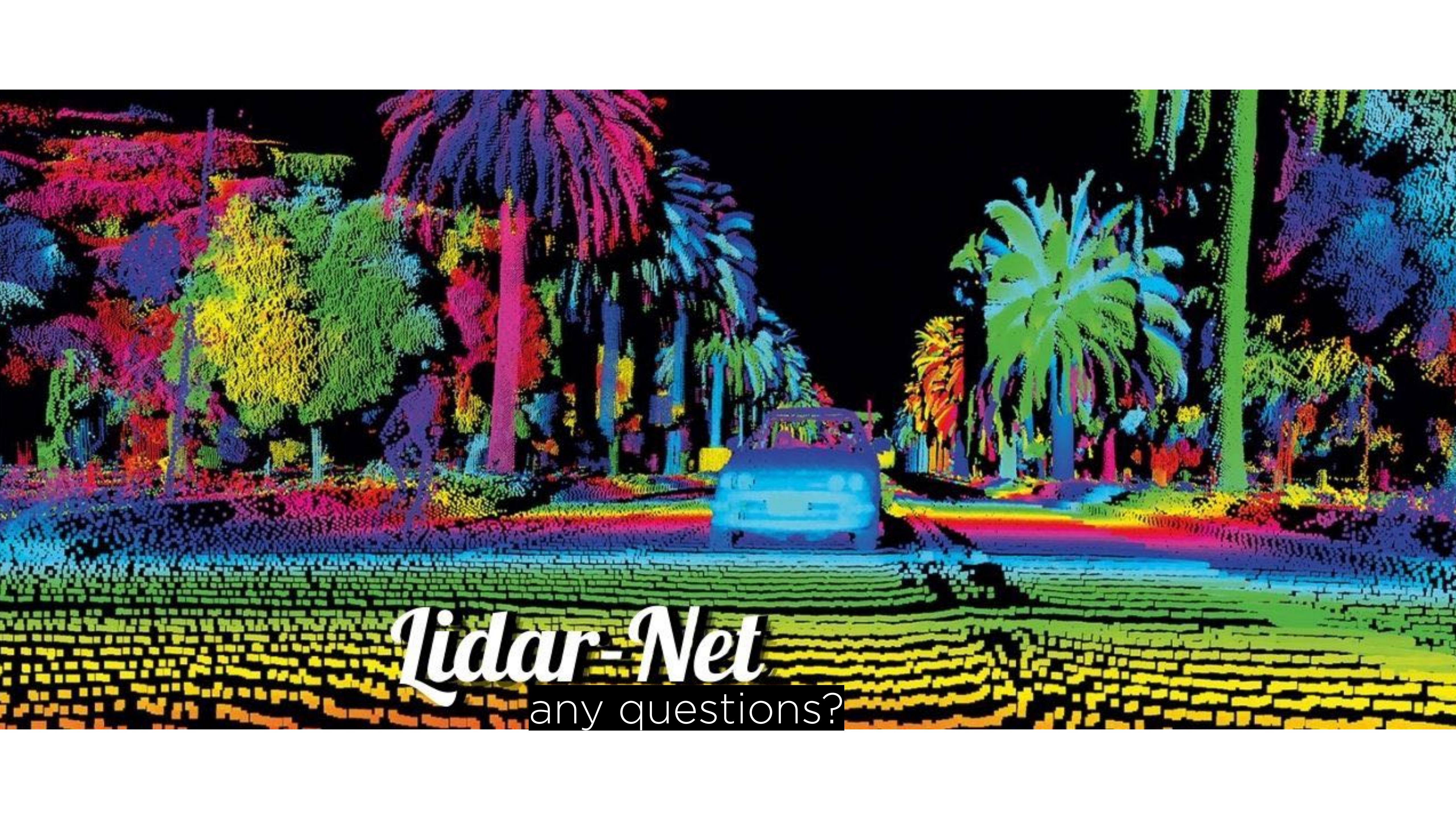
# Predictions



# Next Steps

- Larger Dataset
- Multi-class Object Detection





*Lidar-Net*  
any questions?