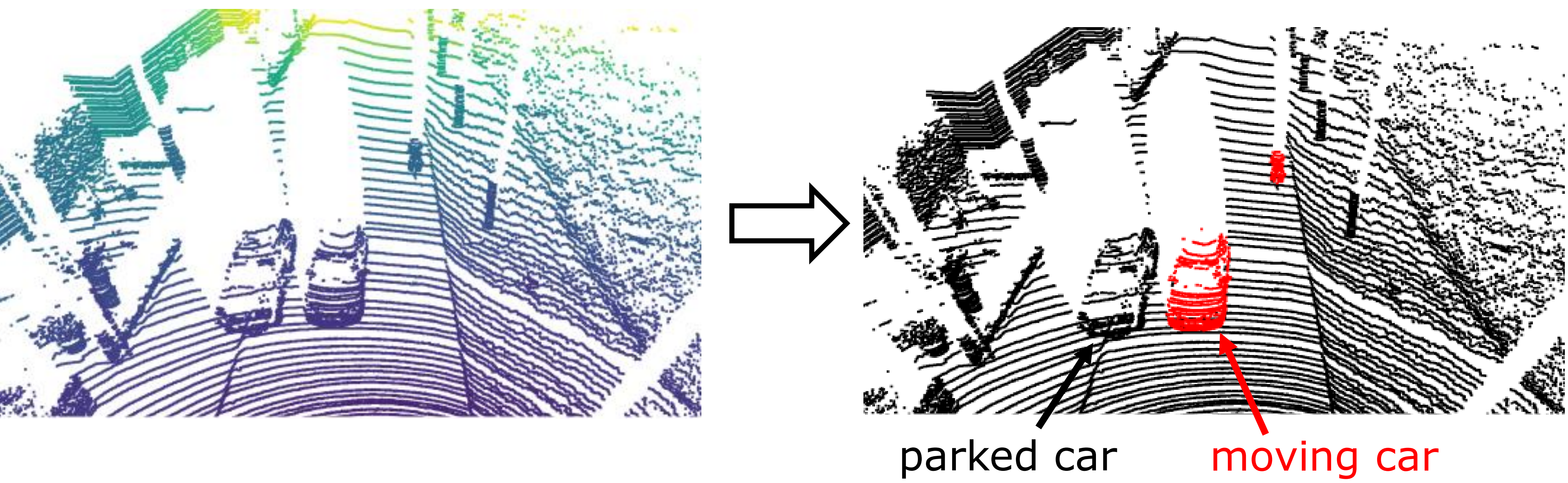
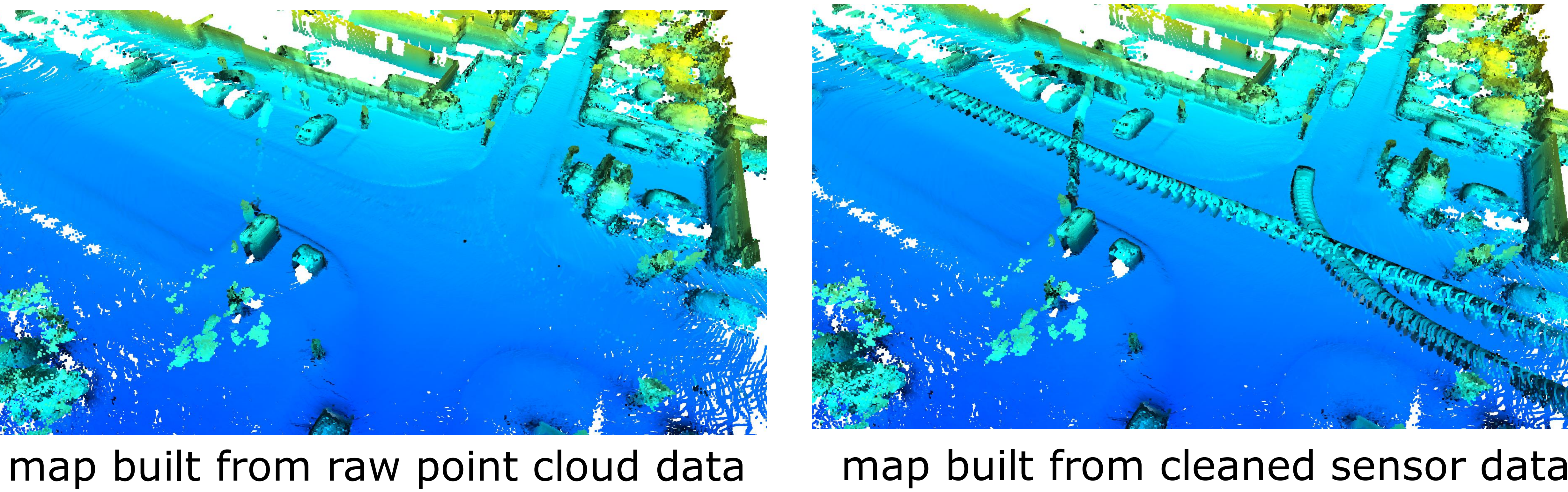


Moving Object Segmentation for LiDAR-based Localization and Mapping

Xieyuanli Chen

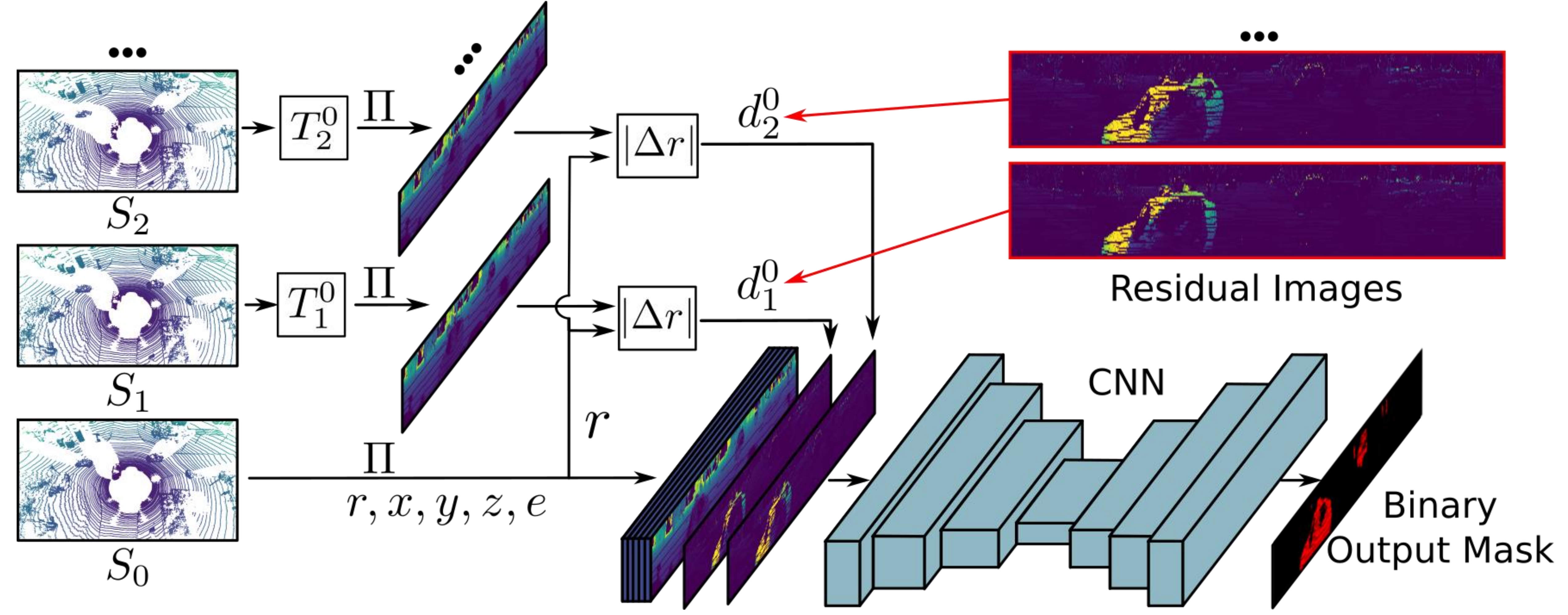


- **Range image representation** of 3D LiDAR scans
- Employs **CNNs** exploiting **sequential information**
- Runs **online** and **improves LiDAR SLAM**

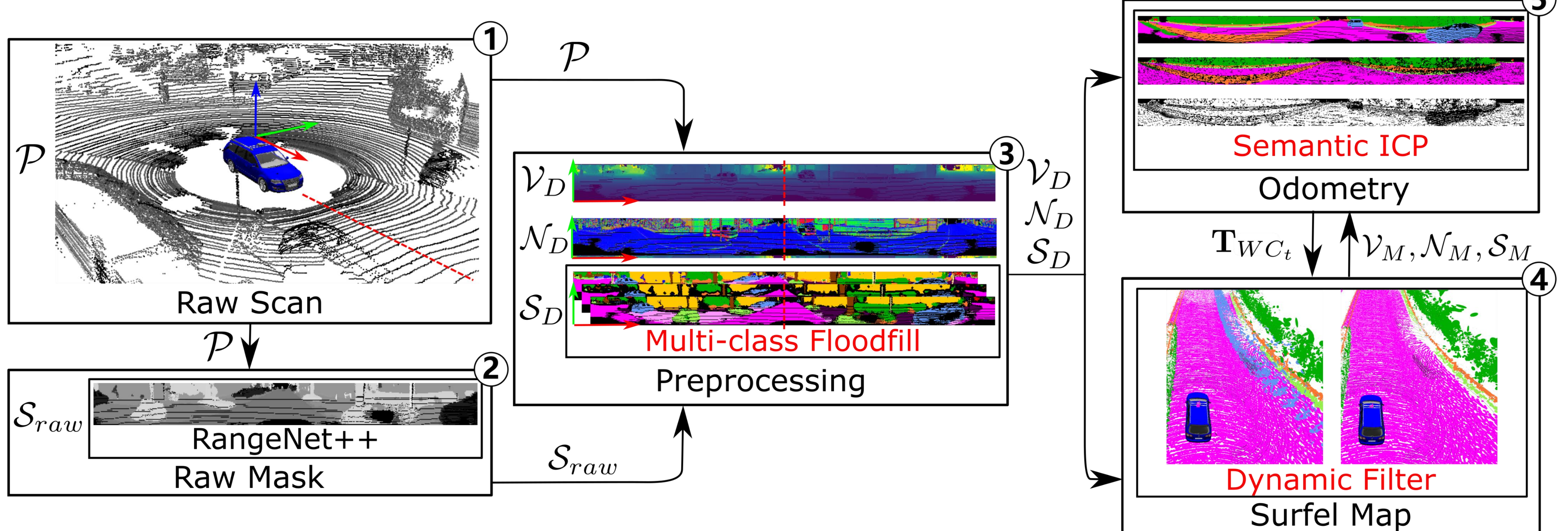


KITTI Odometry	SuMa	SuMa++	SuMa+MOS
Train (Seq. 00-10)	0.36/0.83	0.29/0.70	0.29/0.66
Test (Seq. 11-21)	0.34/1.39	0.34/1.06	0.33/0.99

LiDAR-MOS, RAL 2021



SuMa++, IROS 2019



Future Work

- Joint segmentation
- Spatio-temporal architecture
- Unsupervised or self-supervised learning
- Uncertainty estimations