차량 통신 기반의 광역 주행환경 인지 및 협조 주행기술 개발

센서융합 객체인식 개발

Robotics Laboratory, Chungbuk National University (로보틱스 연구실, 충북대학교) Smart Car Research Center, Chungbuk National University (스마트카 연구센터, 충북대학교) Ministry of Science, ICT and Future Planning (미래창조과학부)



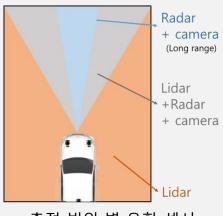


센서 융합

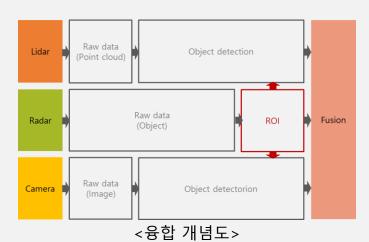
Sensor system



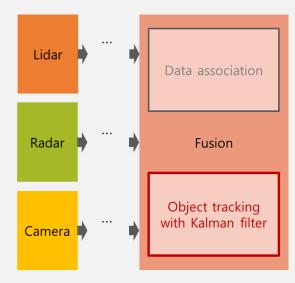
Object detection



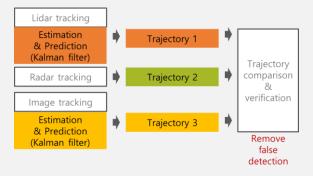
<측정 범위 별 융합 센서>



Object tracking

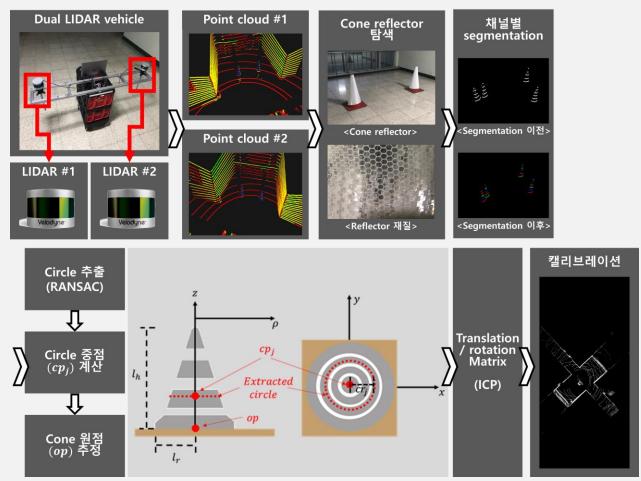


<융합 레이어>

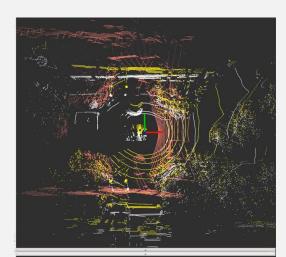


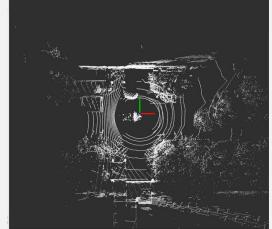
<객체 추적 및 검증>

다중 라이다 캘리브레이션









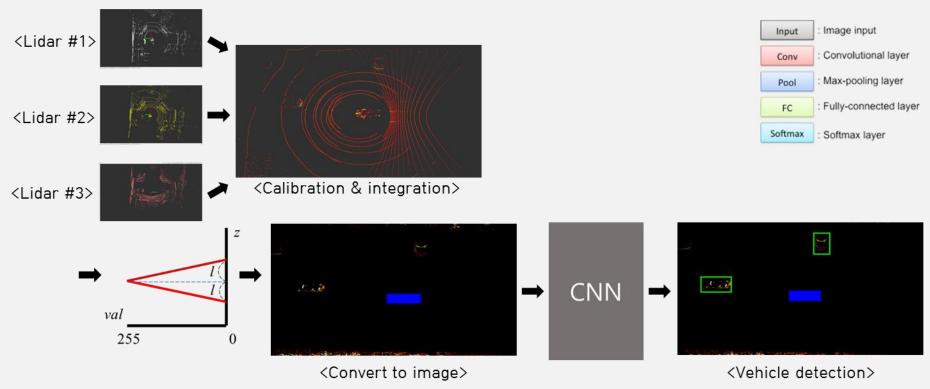
<캘리브레이션 전(상)/후(하)>

객체 인식

- Deep learning-based object detection using lidar sensors
 - VGGNet [1]



< VGGNet 16-layer의 구조>



[1] K. Simonyan and A. Zisserman. "Very deep convolutional networks for large-scale image recognition.", pp. 1409-1556, 2014.

