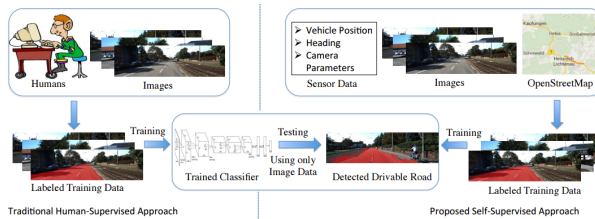


Map-Supervised Road Detection

Ankit Laddha, Mehmet Kemal Kocamaz, Luis E. Navarro-Serment, and Martial Hebert (IV 2016)



- ▶ Proposes an approach to detect drivable road area in monocular images
- ▶ Self-supervised approach which doesn't require any human road annotations on images to train the road detection algorithm
- ▶ First, they automatically generate training drivable road area annotations for images using noisy OpenStreetMap data, vehicle pose estimation sensors (GPS and IMU) on the vehicle, and camera parameters
- ▶ Next, they train a Convolutional Neural Network using these noisy labels for road detection
- ▶ Outperforms all the methods which do not require human effort for image labeling
- ▶ Evaluates on KITTI dataset