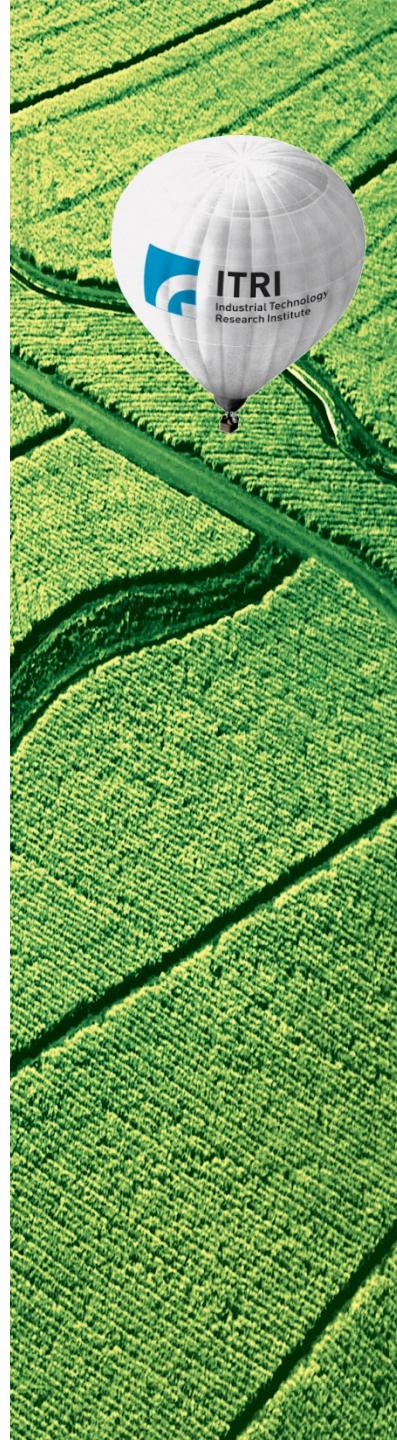


# 工業技術研究院

Industrial Technology  
Research Institute

## CV Final Project

3D Reconstruction  
from  
Road Marker Feature Points



# Autonomous vehicle Visual based localization



Source: <https://youtu.be/At0rx9c4KcQ?t=19>

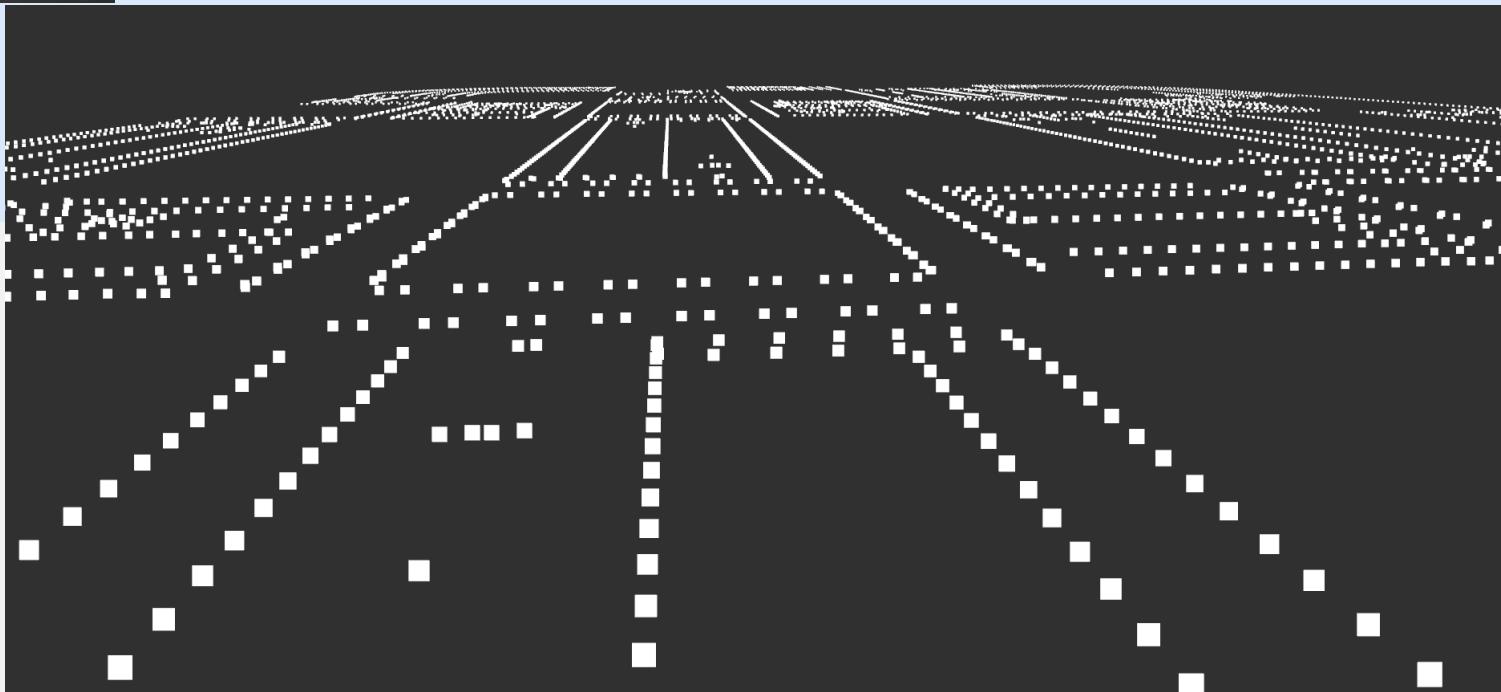
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# Road marker feature points 3D reconstruction

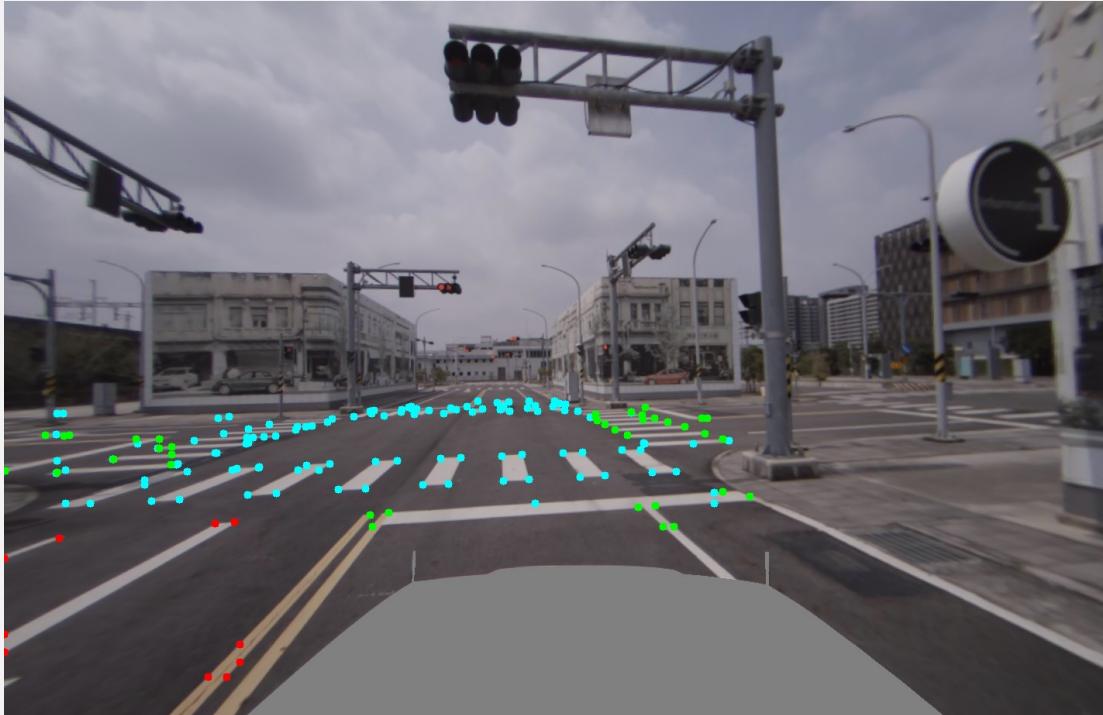
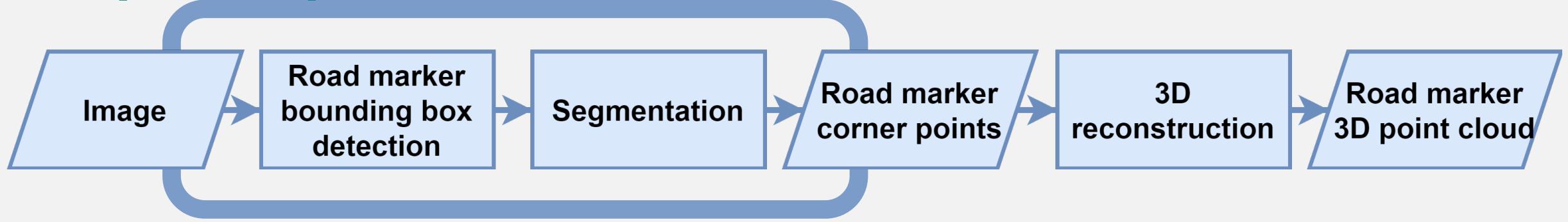


Input: video

Output: 3D point cloud



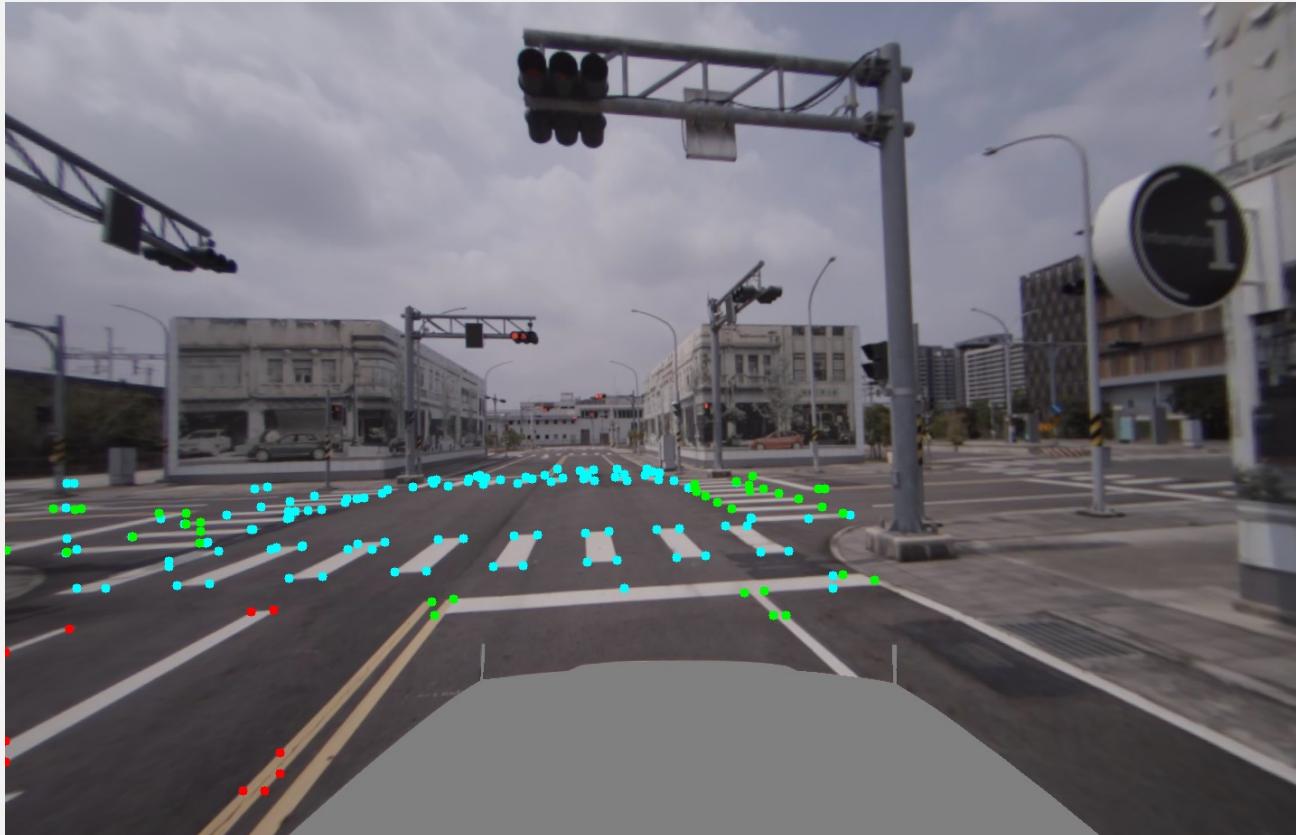
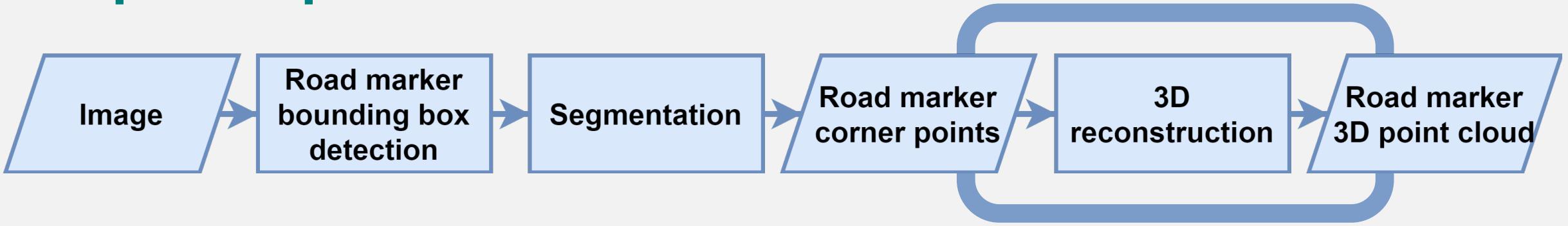
# Simple Pipeline Reference



Reference methods:

- crop
- threshold
- inRange
- findContours
- approxPolyDP

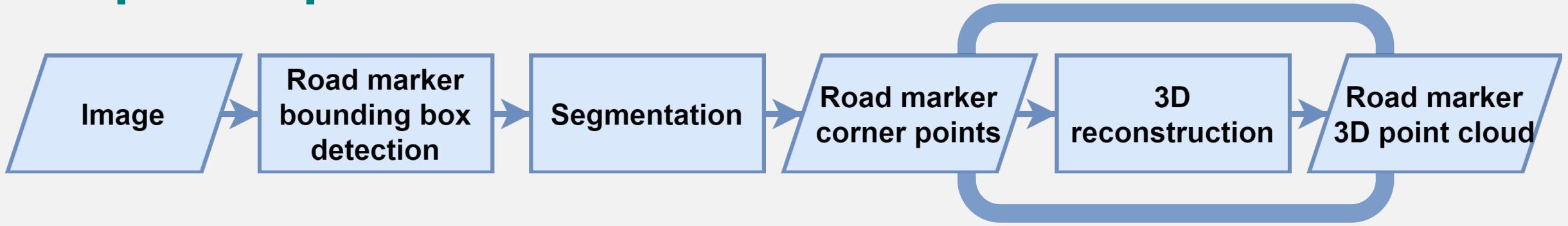
# Simple Pipeline Reference



Reference methods:

- Pinhole model
- Structure from motion
- keyword:
  - SLAM
  - Visual-Inertial Odometry

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