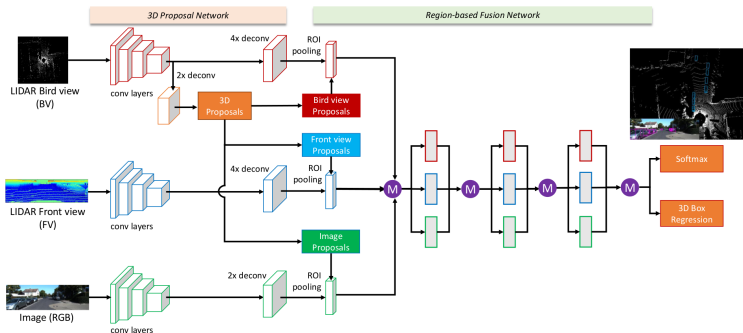


# Multi-View 3D Object Detection Network for Autonomous Driving

X. Chen, H. Ma, J. Wan, B. Li, T. Xia (ARXIV2016)



- ▶ 3D object detection using both LIDAR point cloud and RGB images
- ▶ LIDAR point cloud for more accurate 3D locations, image-based methods for higher accuracy in terms of 2D box evaluation
- ▶ Multi-View 3D networks (MV3D) using two sub-networks
- ▶ 3D proposal generation network utilizing a bird's eye view representation of point cloud
- ▶ Multi-view feature fusion network:
  - ▶ Region-wise features from multiple views
  - ▶ Interactions between intermediate layers of different paths
  - ▶ Superior performance over the early/late fusion scheme
- ▶ Evaluated on KITTI benchmark, outperforming state-of-the-art by large margins