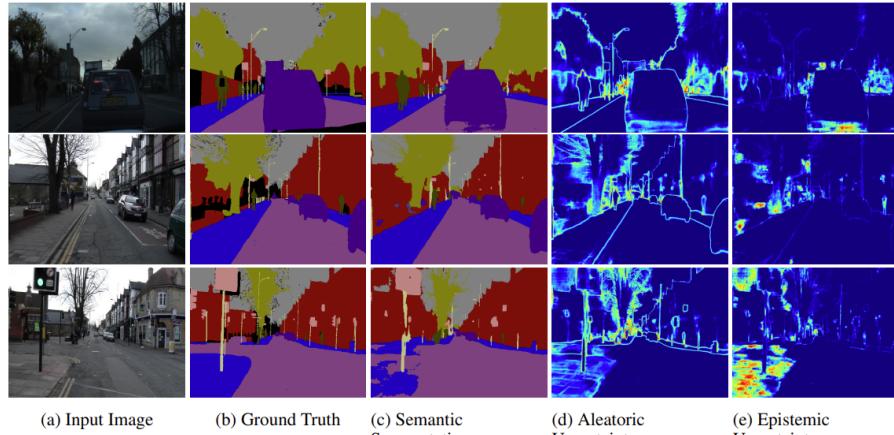


Uncertainty modelling in LiDAR scene segmentation using neural networks (Hanieh Shojaei, IKG)

Different Approaches

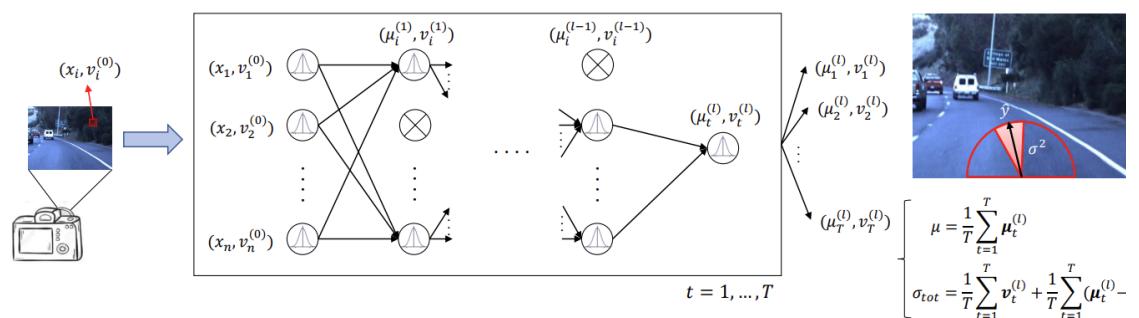
- Assuming distributions over all parameters
- Deterministic weights, distributions for activations
- Monte-Carlo sampling
- Adding variance variable to each output



[1] Feng, Di. Uncertainty estimation for object detection using deep learning approaches. Diss. Universität Ulm, 2021.

Proposed approach

- ✓ Agnostic to the network architecture
- ✓ No change in learning process
- ✓ Useful for already trained networks



[2] Loquercio, Antonio, Mattia Segu, and Davide Scaramuzza. "A general framework for uncertainty estimation in deep learning." *IEEE Robotics and Automation Letters* 5.2 (2020)