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Bringing semantic segmentation to DuckieTown

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Outline

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Introduction

What is semantic segmentation

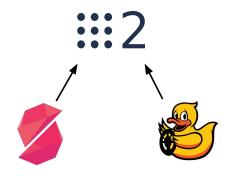
https://www.youtube.com/watch?v=

Problem statement

Given the simulator train a network, that can perform well in a real duckietown environment

Environment description

- Duckietown environment
- LGSVL Simulator
- ROS2



Significance of Research

- Hands-on Deep Learning research
- Algorithms and techniques that are actually used in self-driving vehicles
- Possible contribution to ROS2 platform, which is currently under heavy-development





• Hack the simulator to change the textures



- Hack the simulator to change the textures
- Get the training data



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- Train the network



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Possible SW architecture

Sw part