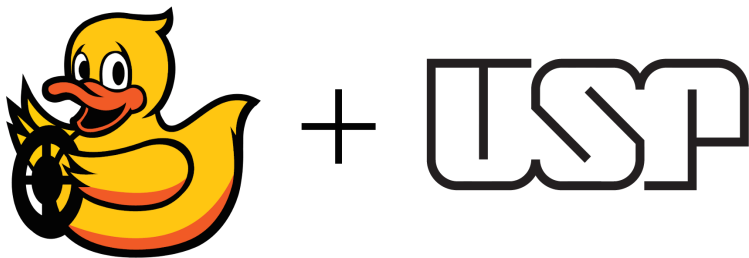


Duckievillage: OpenAI Gym Duckietown na USP

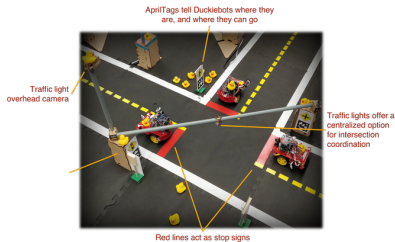
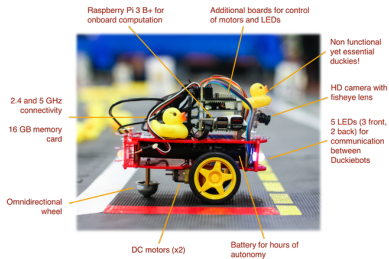


MAC0318 - Introdução à Programação de Robôs Móveis

Instituto de Matemática e Estatística (IME)
Universidade de São Paulo (USP)

Duckietown

Robótica com patinhos.



Videos

<https://www.duckietown.org/>

OpenAI Gym

"Gym is a toolkit for developing and comparing reinforcement learning algorithms. It supports teaching agents everything from walking to playing games like Pong or Pinball."

<http://gym.openai.com/>

Exemplos: <http://gym.openai.com/envs>

Gym-Duckietown

Simulador do Duckietown no OpenAI Gym.



<https://github.com/duckietown/gym-duckietown>

Duckievillage

OpenAI Gym Duckietown com adaptações e exercícios de:

- ▶ Navegação por pontos
- ▶ Mapa topológico
- ▶ Campo potencial
- ▶ Localização
- ▶ Aprendizagem por imitação
- ▶ Aprendizagem por reforço

<https://github.com/RenatoGeh/duckievillage>

Setup

1. Instalar Gym-Duckietown com todas as dependências
2. `git clone Duckievillage:`
 - ▶ `git clone https://github.com/RenatoGeh/duckievillage`
3. Teste Duckievillage:
 - ▶ `cd duckievillage`
 - ▶ `python3 -m assignments.manual`