

ROS在MobileRobots移动平台的应用



产品经理：周秋翔
北京利曼科技有限公司
邮箱：qxzhou@leemanchina.com

ActivMedia Robotics

1995



2010



2016

现有用户

LEEMAN CHINA

利 曼 · 中 国



清华大学

Tsinghua University



北京大学
PEKING UNIVERSITY



中国科学院
CHINESE ACADEMY OF SCIENCES



中航工业



中国东方电气集团有限公司
DONGFANG ELECTRIC CORPORATION



中国移动
China Mobile



lenovo
联想



HUAWEI



SIEMENS
西门子



CETC 中国电子科技集团公司
China Electronics Technology Group Corporation



京东方
BOE



中国农业科学院
CHINESE ACADEMY OF AGRICULTURAL SCIENCES

中煤科工集团重庆研究院有限公司

产品系列

大型机器人



GuiaBot

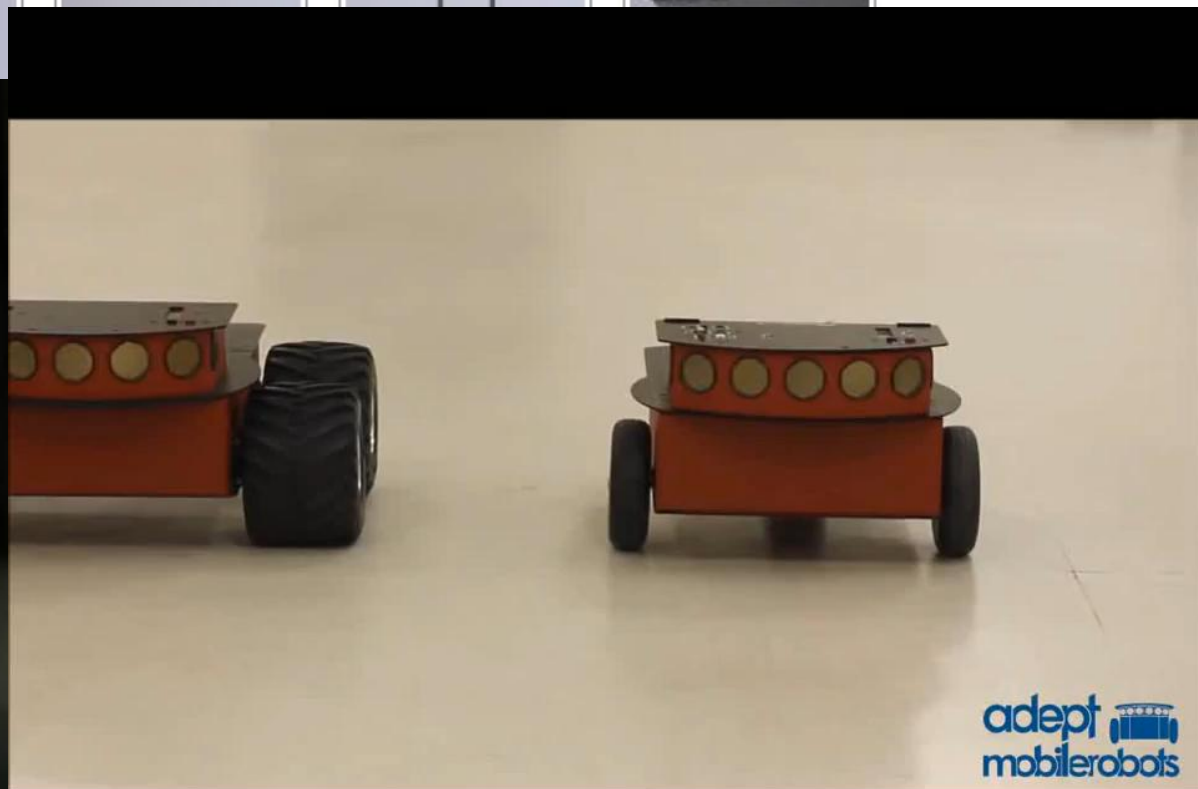
24*7工作制人
平台

中型机器人

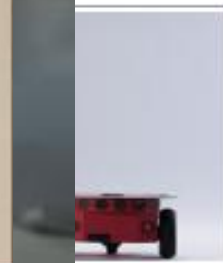


PioneerLX

自主室内移动平台



www.mobilerobots.com



3-DX

最受欢迎的机器人本

人

体

Pioneer 3-AT

Pioneer LX Manipulator

PowerBot

Seekur

Resources:

- Website
- Wiki

Robot Category:

- ground

Large outdoor general-purpose holonomic mobile robot platform



autonomous

ground

outdoor

mobile base

mobile robot

research

holonomic

Pioneer 3-DX

Pioneer LX

Seekur Jr

Resources:

- Website
- Wiki

Robot Category:

- ground

Large outdoor general-purpose skid-steer robot



autonomous

diff-drive

ground

outdoor

mobile base

mobile robot

research

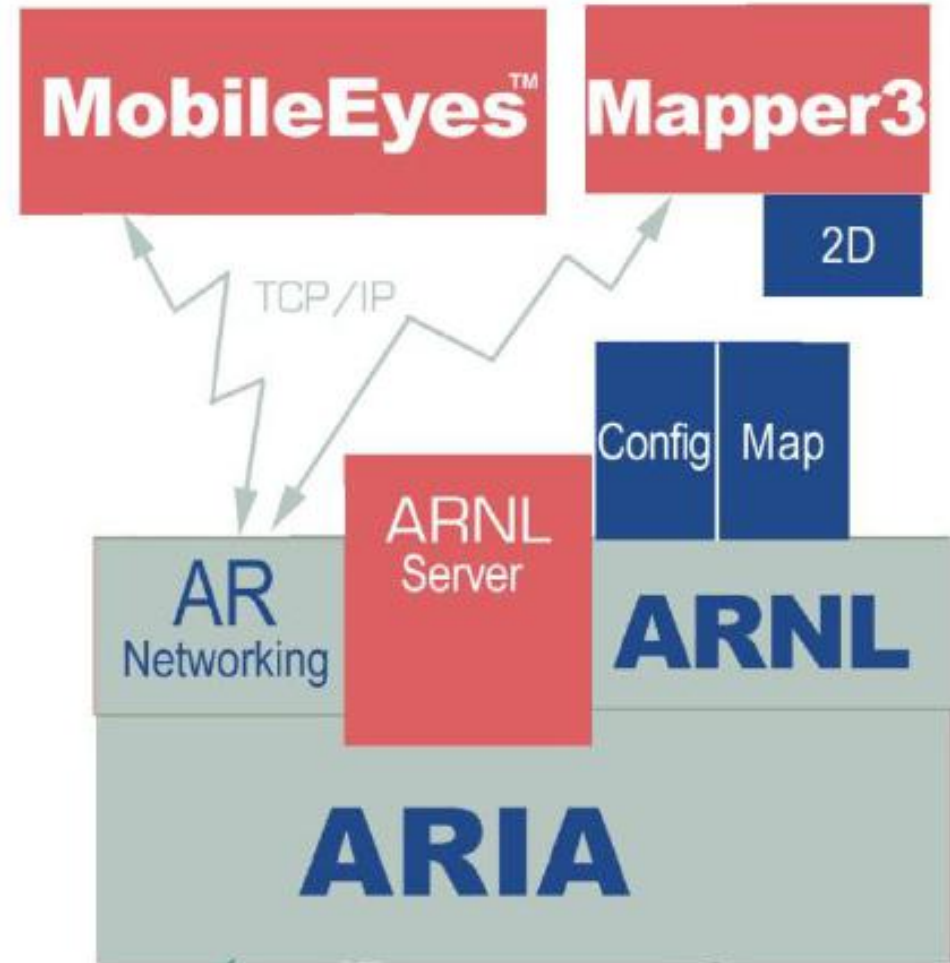
skidsteer

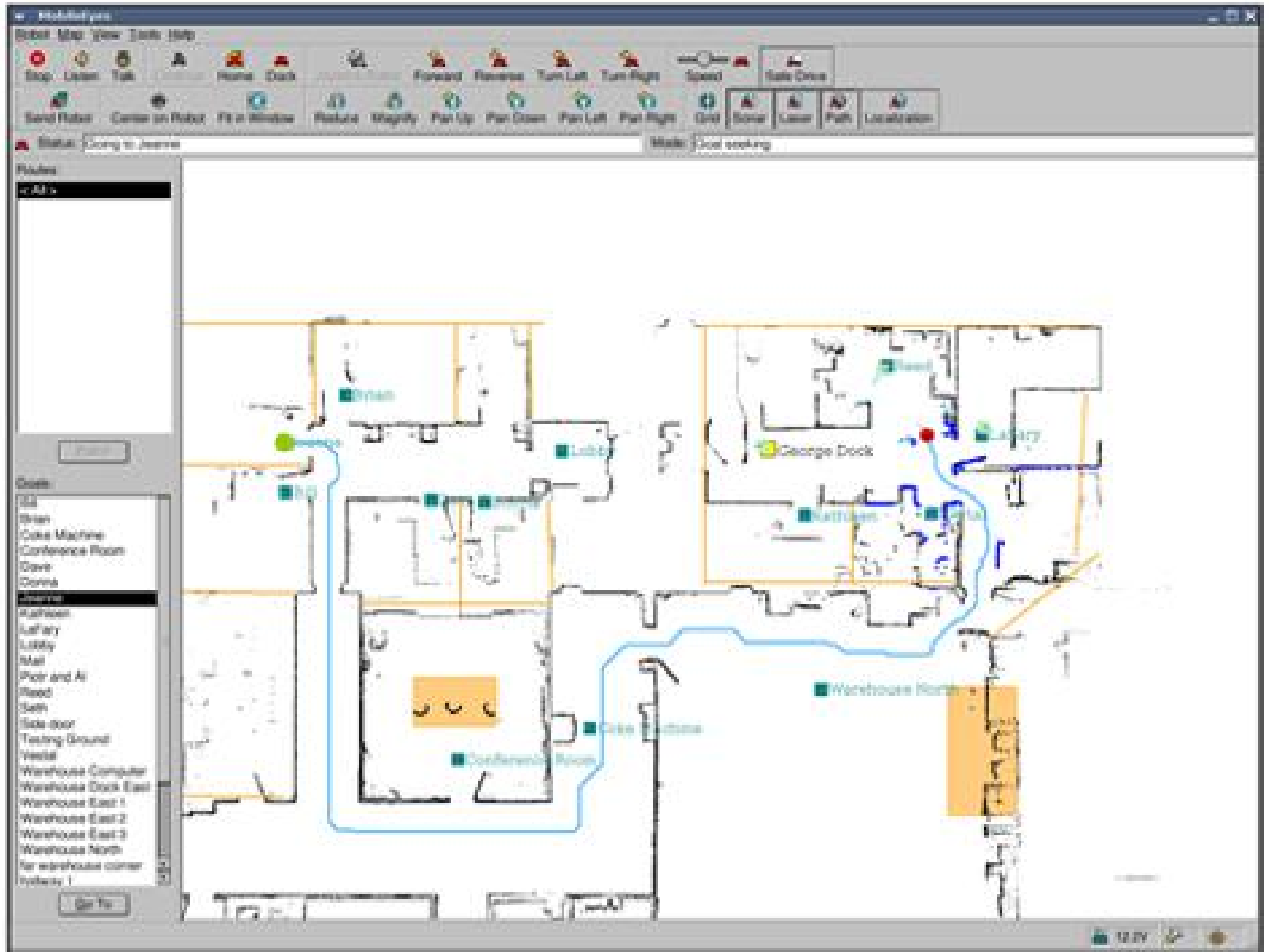
主要函数库

- Aria
- ArNetworking
- Arnl

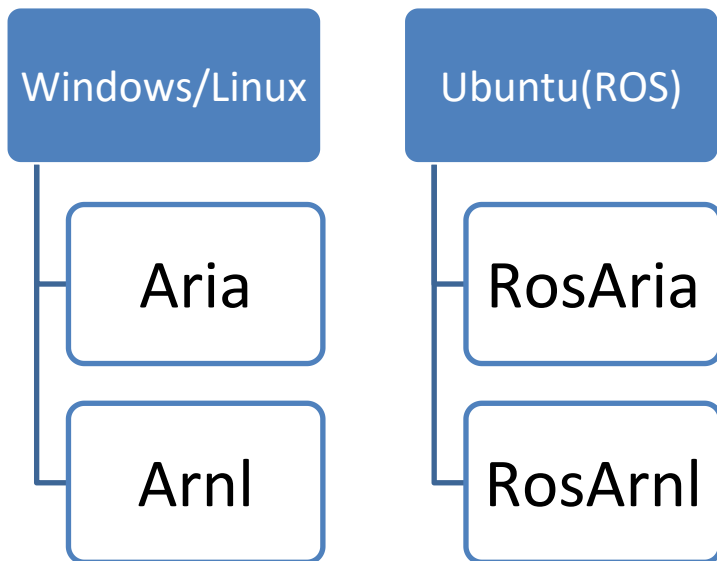
主要软件

- MobileEyes
- MobileSim
- Mapper

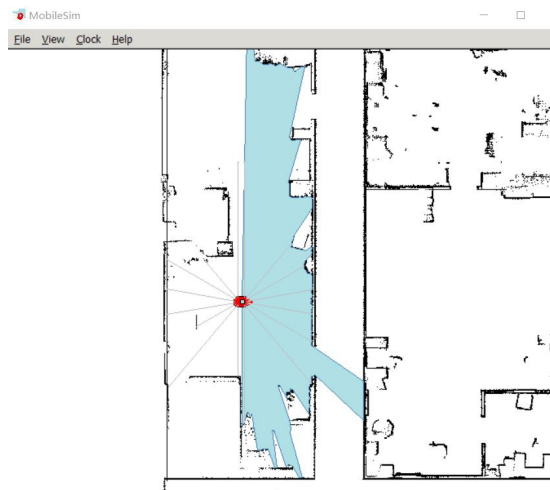




开源库及软件使用

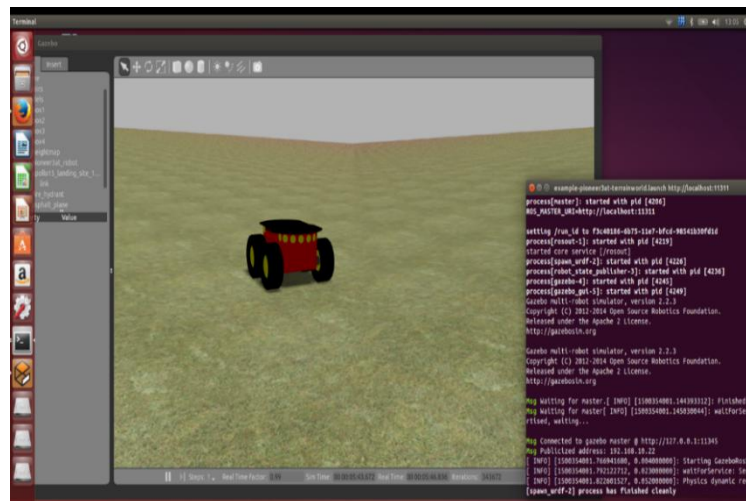


开源库及软件使用

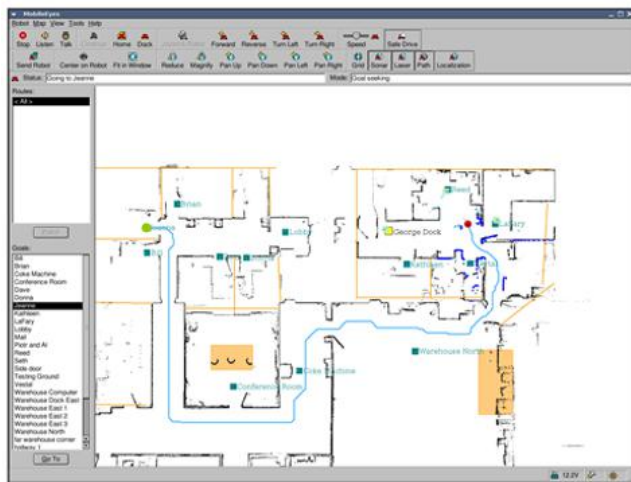


```
p3dx-sh: Port opened. Listening on TCP port 8101... [1808]
p3dx-sh: Ready for a client to connect on TCP port 8101.
p3dx-sh: Client connected from LAPTOP-N9DVSEC2 (127.0.0.1)
p3dx-sh: Laser on
```

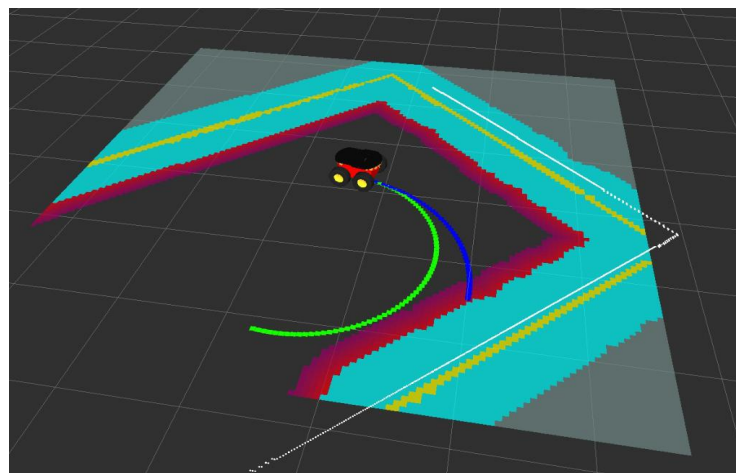
MobileSim(模拟器)



Gazebo



Mobileyes (GUI界面)

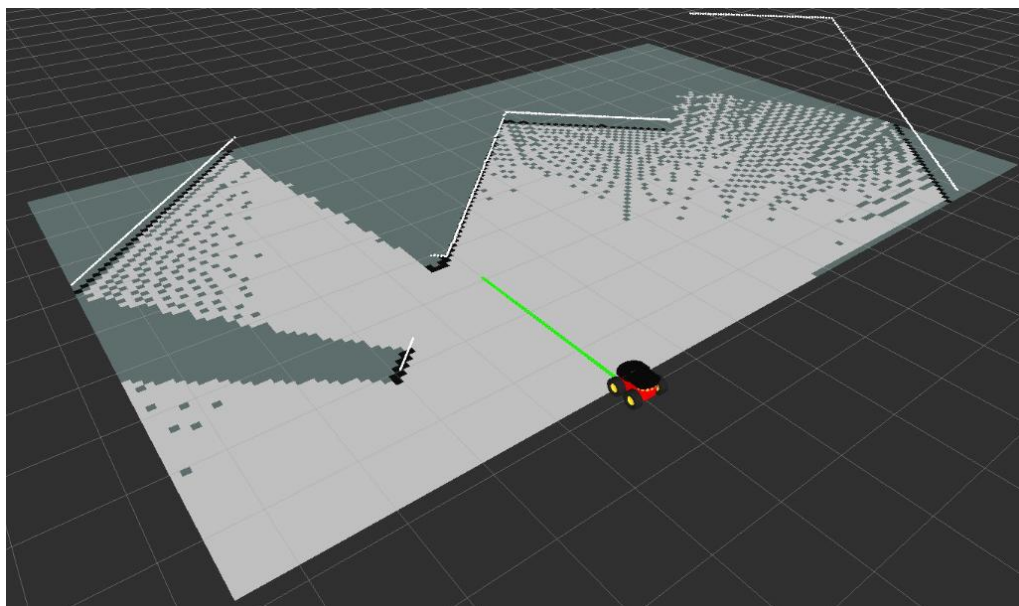


RVIZ

导航、路径规划和SLAM



1. 已知地图下的自主定位和导航
(move_base/gmapping/amcl)
2. SLAM算法验证和优化



机器视觉

OpenCV, O



(波器)

ToTrack

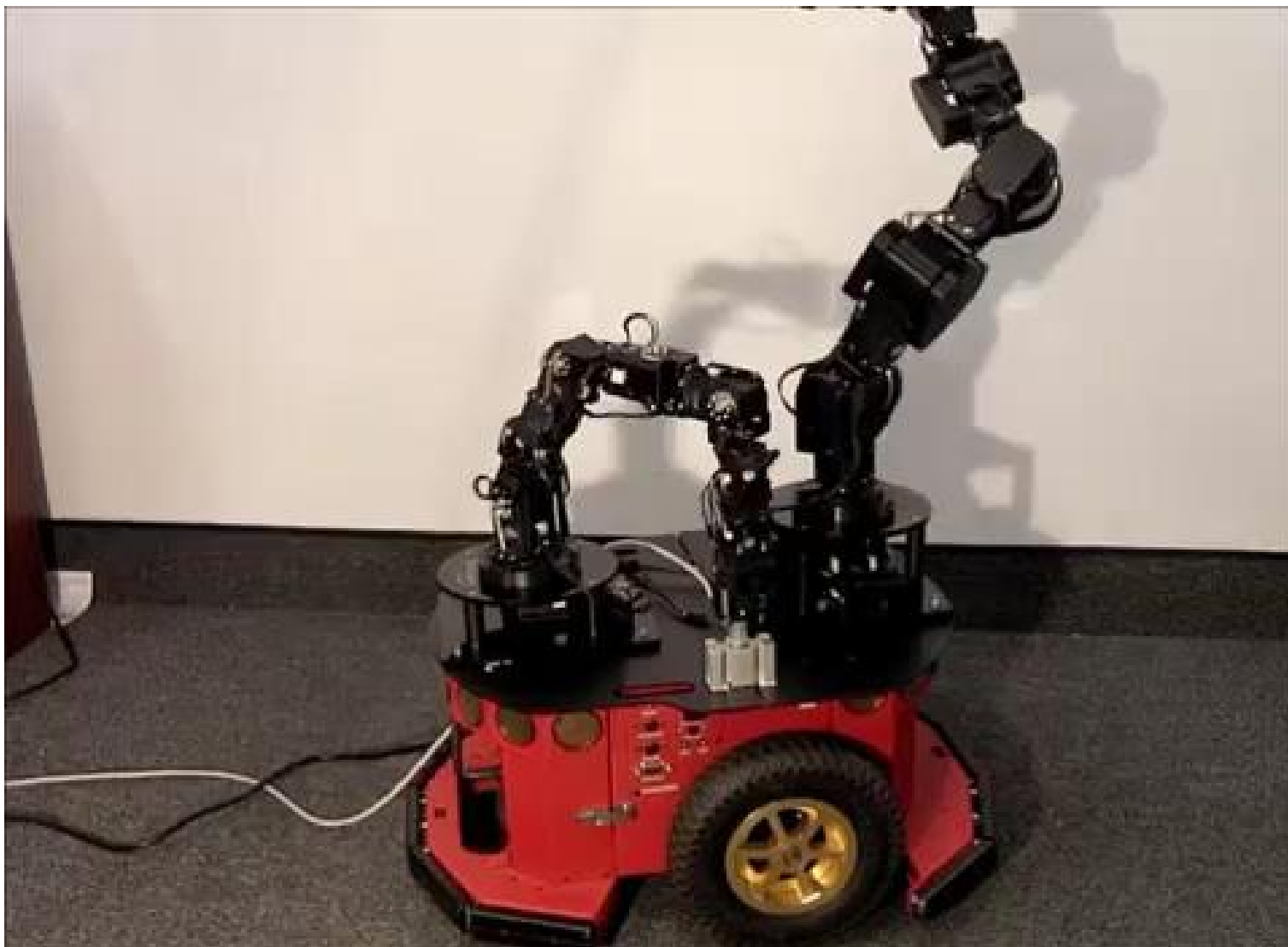
B-D-

[slam_v2/](#)

编队



协作



讨论交流

