

## ROBT403 - Robotics II: Control, Modeling and Learning Lab sessions, 2021

## Lab 2

1) What is ROS

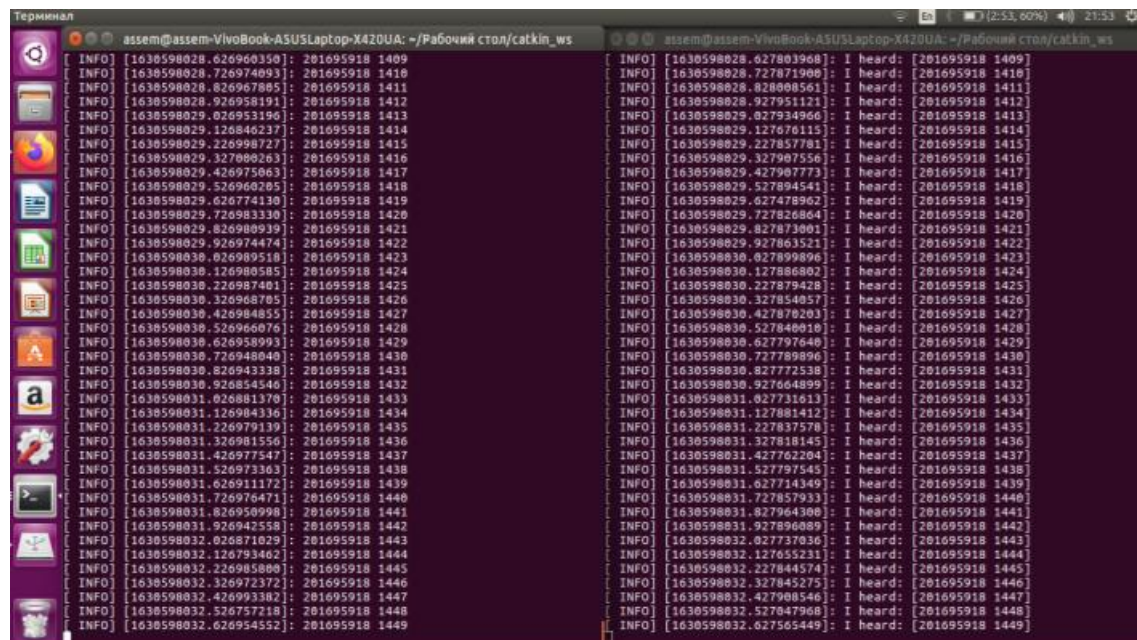
2) Examples of robots that use ROS

3) Screenshots of the Publisher –Subscriber with the Topic name of your name that sends your NU id numbers one by one in the loop

1) The Robot Operating System (ROS) is an open-source framework that helps researchers and developers build and reuse code between robotics applications. ROS is also a global open-source community of engineers, developers and hobbyists who contribute to making robots better, more accessible and available to everyone.

2) TurtleBot, a mobile robotBaxter, A friendly two-armed robot, Crazygie and Bebop, flying robots.

3)



The image shows two terminal windows side-by-side. The left window is titled 'assem@assem-VivoBook-ASUSLaptop-X420UA: ~/Рабочий стол/catkin\_ws' and displays a series of 'INFO' messages from a ROS publisher. Each message contains a timestamp, a topic name (e.g., '/nu\_id'), and a numerical value (e.g., 1409, 1410, 1411, etc.). The right window is titled 'assem@assem-VivoBook-ASUSLaptop-X420UA: ~/Рабочий стол/catkin\_ws' and displays a series of 'INFO' messages from a ROS subscriber. Each message contains a timestamp, a topic name (e.g., '/nu\_id'), and a numerical value (e.g., 1409, 1410, 1411, etc.). The messages in both windows are identical, indicating a successful communication between the publisher and subscriber.

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Терминал
assem@assem-VivoBook-ASUSLaptop-X420UA: ~/Рабочий стол/catkin_ws
[INFO] [1630598028.626960350]: 201695918 1409
[INFO] [1630598028.726974093]: 201695918 1410
[INFO] [1630598028.826987836]: 201695918 1411
[INFO] [1630598028.926991579]: 201695918 1412
[INFO] [1630598029.026995322]: 201695918 1413
[INFO] [1630598029.126999065]: 201695918 1414
[INFO] [1630598029.226999808]: 201695918 1415
[INFO] [1630598029.327003551]: 201695918 1416
[INFO] [1630598029.427007294]: 201695918 1417
[INFO] [1630598029.527011037]: 201695918 1418
[INFO] [1630598029.627014780]: 201695918 1419
[INFO] [1630598029.727018523]: 201695918 1420
[INFO] [1630598029.827022266]: 201695918 1421
[INFO] [1630598029.927026009]: 201695918 1422
[INFO] [1630598030.027029752]: 201695918 1423
[INFO] [1630598030.127033495]: 201695918 1424
[INFO] [1630598030.227037238]: 201695918 1425
[INFO] [1630598030.327040981]: 201695918 1426
[INFO] [1630598030.427044724]: 201695918 1427
[INFO] [1630598030.527048467]: 201695918 1428
[INFO] [1630598030.627052210]: 201695918 1429
[INFO] [1630598030.727055953]: 201695918 1430
[INFO] [1630598030.827059696]: 201695918 1431
[INFO] [1630598030.927063439]: 201695918 1432
[INFO] [1630598031.027067182]: 201695918 1433
[INFO] [1630598031.127070925]: 201695918 1434
[INFO] [1630598031.227074668]: 201695918 1435
[INFO] [1630598031.327078411]: 201695918 1436
[INFO] [1630598031.427082154]: 201695918 1437
[INFO] [1630598031.527085897]: 201695918 1438
[INFO] [1630598031.627089640]: 201695918 1439
[INFO] [1630598031.727093383]: 201695918 1440
[INFO] [1630598031.827097126]: 201695918 1441
[INFO] [1630598031.927100869]: 201695918 1442
[INFO] [1630598032.027104612]: 201695918 1443
[INFO] [1630598032.127108355]: 201695918 1444
[INFO] [1630598032.227112098]: 201695918 1445
[INFO] [1630598032.327115841]: 201695918 1446
[INFO] [1630598032.427119584]: 201695918 1447
[INFO] [1630598032.527123327]: 201695918 1448
[INFO] [1630598032.627127070]: 201695918 1449

assem@assem-VivoBook-ASUSLaptop-X420UA: ~/Рабочий стол/catkin_ws
[INFO] [1630598028.627803968]: I heard: [201695918 1409]
[INFO] [1630598028.727817711]: I heard: [201695918 1410]
[INFO] [1630598028.827831454]: I heard: [201695918 1411]
[INFO] [1630598028.927835197]: I heard: [201695918 1412]
[INFO] [1630598029.027838940]: I heard: [201695918 1413]
[INFO] [1630598029.127842683]: I heard: [201695918 1414]
[INFO] [1630598029.227846426]: I heard: [201695918 1415]
[INFO] [1630598029.327850169]: I heard: [201695918 1416]
[INFO] [1630598029.427853912]: I heard: [201695918 1417]
[INFO] [1630598029.527857655]: I heard: [201695918 1418]
[INFO] [1630598029.627861398]: I heard: [201695918 1419]
[INFO] [1630598029.727865141]: I heard: [201695918 1420]
[INFO] [1630598029.827868884]: I heard: [201695918 1421]
[INFO] [1630598029.927872627]: I heard: [201695918 1422]
[INFO] [1630598030.027876370]: I heard: [201695918 1423]
[INFO] [1630598030.127880113]: I heard: [201695918 1424]
[INFO] [1630598030.227883856]: I heard: [201695918 1425]
[INFO] [1630598030.327887599]: I heard: [201695918 1426]
[INFO] [1630598030.427891342]: I heard: [201695918 1427]
[INFO] [1630598030.527895085]: I heard: [201695918 1428]
[INFO] [1630598030.627898828]: I heard: [201695918 1429]
[INFO] [1630598030.727902571]: I heard: [201695918 1430]
[INFO] [1630598030.827906314]: I heard: [201695918 1431]
[INFO] [1630598030.927910057]: I heard: [201695918 1432]
[INFO] [1630598031.027913800]: I heard: [201695918 1433]
[INFO] [1630598031.127917543]: I heard: [201695918 1434]
[INFO] [1630598031.227921286]: I heard: [201695918 1435]
[INFO] [1630598031.327925029]: I heard: [201695918 1436]
[INFO] [1630598031.427928772]: I heard: [201695918 1437]
[INFO] [1630598031.527932515]: I heard: [201695918 1438]
[INFO] [1630598031.627936258]: I heard: [201695918 1439]
[INFO] [1630598031.727939991]: I heard: [201695918 1440]
[INFO] [1630598031.827943734]: I heard: [201695918 1441]
[INFO] [1630598031.927947477]: I heard: [201695918 1442]
[INFO] [1630598032.027951220]: I heard: [201695918 1443]
[INFO] [1630598032.127954963]: I heard: [201695918 1444]
[INFO] [1630598032.227958706]: I heard: [201695918 1445]
[INFO] [1630598032.327962449]: I heard: [201695918 1446]
[INFO] [1630598032.427966192]: I heard: [201695918 1447]
[INFO] [1630598032.527969935]: I heard: [201695918 1448]
[INFO] [1630598032.627973678]: I heard: [201695918 1449]
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