Faculty of Information Technology
Brno University of Technology
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Czech Republic

Robo@FIT 3rd Workshop

Getting started in ROS

❖ BASIC KNOWLEDGE OF ROS USAGE ❖

❖ EXPERIENCE PRACTICAL CASES ❖

❖ ROS USAGE AS A R&D TOOL FOR A ROBOTICS RESEARCH TEAM ❖

This one-day workshop took place on **October 29, 2014** at **RoboLab (O104),** Faculty of Information Technology, Brno University of Technology. This workshop is supported by research groups at FIT doing R&D in robotic topics.

Motivation & Objectives

This ***workshop*** provides a hands-on introduction to ROS - Robotic Operating System - and its use for ***several robotic*** platforms. ***ROS*** has been emerging as a standard for robot software development. It is an open-source, meta-operating system that provides hardware abstraction services. It implements low and high level functionality. The ***speakers*** at the workshop are researchers that are currently using ROS for their work. As an ***outcome*** of this workshop, attendees will have a basic knowledge on how to use ROS and have a good insight on how ROS can be used as a software development tool in the context of robotics research team.

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Participation

We would like to invite you to **Getting started in ROS** workshop, whether you are experienced experts or just getting started with robotics. Do not hesitate to contact Víťa Beran (beranv@fit.vutbr.cz) if you have any questions.
The workshop participation is free and is in Czech language (unless stated otherwise).

Prerequisites

- your own laptop,
- installed Ubuntu 12.04, ROS hydro distribution
- done ROS tutorials beginner level
- list of your tasks and problems that you wish to work on

Schedule

- 08:30, welcome, solving fundamental problems
- 09:30, basic principles and tools: Rviz, gazebo, MoevIt!, rosbag etc.
- 11:30, lunch
- 12:30, "hands on" robotic platforms: PR2, Toad, Ed, Tyra
- 16:30, planned end of the event

Robotic platforms

			
Ed	**Toad**	**Tyra**	**PR2**

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Zpráva

Na 24 studentů FIT se sešlo v robotické laboratoři a pod vedením členů výzkumné skupiny robotiky se seznámili se základními principy a nástroji systému ROS a s robotickými platformami v laboratoři.
V rámci dopoledního bloku studenti definovali a naučili se základní znalosti ROSu, které prakticky zkoušeli na příkladové aplikaci. Po obědě jsme dokončili ukázkovou aplikaci a přemístili se k robotům. Vytvořilo se několik skupinek studentů s různým zaměřením na různých robotech (včetně přípravy simulačního prostředí pro PR2), které společnými silami řešili základní i pokročilé úlohy a praktické problémy.