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MASARYKOVA UNIVERZITA
FACULTY OF INFORMATICS
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BACHELOR'S THESIS DESCRIPTION

Student:	Ondřej Svoboda
Programme:	Informatics
Field of Study:	Mathematical Informatics
Field guarantor:	prof. RNDr. Petr Hliněný, Ph.D. (MI)
Thesis supervisor:	prof. RNDr. Jiří Barnat, Ph.D.
Consultant:	Mgr. Jan Mrázek
Department:	Department of Computer Science
Title of the thesis/dissertation:	Simulating RoFI Platform in GazeboSim
Title of the thesis in English:	Simulating RoFI Platform in GazeboSim
Description:	RoFIBots are metamorphic robots constructed from a bunch of autonomous modules. The modules have limited capability of locomotion, however, when connected together, they may perform interesting robotic tasks. The goal of the thesis is to design and implement a plugin in the GazeboSim tool to allow a visual and physical simulation of RoFIBots in a virtual environment. A case study to demonstrate what has to be done by a user to get some RoFIBot model into the simulator and to simulate the execution of some RoFIBot program will be part of the thesis.

The description was approved through IS MU.