

MASARYKOVA UNIVERZITA FAKULTA INFORMATIKY

BOTANICKÁ 68A, 602 00 BRNO

IČ: 00216224 DIČ: CZ00216224

ZADÁNÍ BAKALÁŘSKÉ PRÁCE

Student:	Ondřej Svoboda
Program:	Informatika
Obor:	Matematická informatika
Garant oboru:	prof. RNDr. Petr Hliněný, Ph.D. (MI)
Vedoucí práce:	prof. RNDr. Jiří Barnat, Ph.D.
Konzultant:	Mgr. Jan Mrázek
Katedra:	Katedra teorie programování
Název práce:	Simulating RoFI Platform in GazeboSim
Název práce anglicky:	Simulating RoFI Platform in GazeboSim
Zadání:	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.