

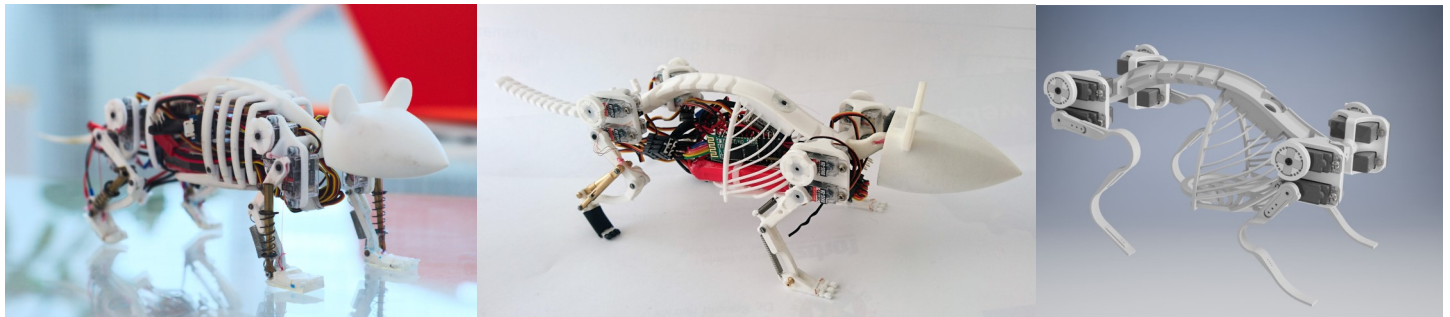
Simulation and control of a biomimetic robot

We developed a rodent robot within the HBP-Project in order to study mechanics and control mechanisms. To design brain derived controllers for the robot we use the Neurorobotics Platform, where the simulated robot can be combined with neuronal networks created in Nest.

POSSIBLE TASKS

Different types of topics are possible:

- 1) You will use the available CAD Data to create a simulation of the newest rodent robot in the Neurorobotics Platform and control it to navigate the simulation.
- 2) Improving the simulation model of the robot using our Robot Designer
- 3) Design an experiment in the NRP and create a neuronal controller for the robot to master the experiment.



Mouse Robot different Versions

All of these topics can be addressed in a Bachelor's or Master's thesis or a Semester Project.

REQUIRED SKILLS

- Python and PyNN
- ROS
- Preferably experience with Blender

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