

Making an easy to build Bipedal Robot with LocoKit

Questions:

- Is it possible to make a biped which is stable in sagittal plane without boom using the LocoKit?
- How can we solve ground clearance easily?
- How can we detect the phases of motion?

Goals:

- Locomote with this simple robot
- Investigate the spring effects
- Reducing the impact effect
- Increasing the robustness
- Optimizing the motion (reducing energy consumption)

Method/Approach:

- Biped with a leg structure inspired from the Cornell Ranger
- Design the leg to lift during the swing phase
- In the first setup to use two motors to swing the legs and one for lifting
- A three legged setup with two outer legs and one center leg

First thing to do: Get used to the LocoKit by building a quadruped.

