Lehrstuhl für Ergonomie
TUM School of Engineering and Design
Technische Universität München

Investigation of Human-like Gait Behavior of the LOLA Robot

BA/SA/MA

As humanoid robots begin to find potential applications in care environments, it becomes increasingly important to understand how their behavior, particularly their gait motion, affects human acceptance. This thesis explores how gait motion are percieved and how it impacts our acceptance of humanoid robots. Different movement patterns for the Humanoid Robot LOLA, each designed to evoke a different level of human-likeness, are generated and animated using the 3D modelling software Blender. A subsequent user study will be conducted in which participants evaluate the human-likeness of the generated animations and investigate the effect on the acceptance of humanoid robots. This research aims to contribute valuable insights to the design of future humanoid robots.

This is a colaborative project between the Chair of Applied Mechanics and the Chair of Ergonomics and thesis will be supervised by both chairs.

Voraussetzungen:

- High motivation and independent working style
- Experience with user studies is a plus
- Experience with Python scripting and Blender is a plus

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