Wolfgang Wiedmeyer

Education

| 10/2013-7/2016 | M.Sc. Mechanical Engineering , <i>Technical University of Munich</i> . |
|-------------------|---|
| Master's thesis | "Development of a Computational Human Motor Control Model Using a Redundant Haptic Interface" |
| Term project | "Development of a Stepplanner for Legged Robots" |
| 10/2010-10/2013 | B.Sc. Medical Technology and Engineering, Technical University of Munich. |
| Bachelor's thesis | "Dynamic Simulation of a Biarticular Variable Stiffness Actuator" |
| 9/2001-6/2010 | Abitur, Pater-Rupert-Mayer-Gymnasium Pullach. |
| advanced courses | Latin and mathematics |
| | Work as student assistant |
| 5/2015-8/2015 | Institute of Applied Mechanics, Technical University of Munich. |
| | Advancement of a stepplanner for the humanoid robot LOLA |
| | Runtime optimization, improvement of the distance calculation between robot and obstacles |

and implementation of an adaptive heuristic for the utilized A* search algorithm 10/2013–2/2014 Institute for Computational Mechanics, *Technical University of Munich*. Tutor for Engineering Mechanics III Helped students with their homework in a weekly consultation hour and during tutorials

11/2011–2/2012 Institute for Materials Handling, Material Flow, Logistics, Technical University of Munich.

Created a video tutorial detailing design and drawing derivation using the CAD software suite $\ensuremath{\mathsf{CATIA}}$

Hands-on experience

9/2012–1/2013 **working student**, *Institute of Robotics and Mechatronics*, German Aerospace Center (DLR), Oberpfaffenhofen.

Analysis of a biarticular joint mechanism under static conditions

The analysis focused on the adjustable stiffness ranges at the endpoint of a robotic planar arm and the results were compared to an actuator without biarticular coupling. Publication:

Höppner, H., Wiedmeyer, W., and van der Smagt, P. (2014). A new biarticular joint mechanism to extend stiffness ranges. In *IEEE International Conference on Robotics and Automation (ICRA)*

7/2010–9/2010 **pre-degree internship**, *KraussMaffei Technologies GmbH*, Munich.

Apprentices' training shop: Learned cutting and forming manufacturing processes TechCenter: Assisted assembly and trial runs of injection molding machines