Robots frequently navigate through dynamic environments, requiring continuous adaptation to ensure adequate performance. We have been using machine learning algorithms to recommend optimal reconfigurations with increased reliability. Furthermore, our commitment lies in developing an environmentally sustainable approach that delivers reconfigurations that effectively balance performance enhancements with energy efficiency.

Focus of Research:

- Design and develop machine-learning models for supporting robotic system configurations
- Experimental validation of modeling on simulated and real robots
- Assist in interpreting, plotting, and presenting the results

Your Profile:

- Currently pursuing advanced studies at the University of Stuttgart
- Programming experience in Python and/or C++
- Comfortable in using a version control systems like Git for collaborative development
- Motivated and proactive
- Previous experience with machine learning algorithms
- Familiarity with machine learning frameworks, such as TensorFlow, PyTorch, and/or OpenCV

We offer:

- Participation in current topics in ML for autonomous robots
- Flexible working hours
- Participation in ISW internal events
- Opportunity to work with real robots

Send your application to:

Jun.-Prof. Dr.reer.nat. Andreas Wortmann
Institut für Steuerungstechnik
der Werkzeugmaschinen und Fertigungseinrichtungen
der Universität Stuttgart
Seidenstr. 36, 70174 Stuttgart

andreas.wortmann@isw.uni-stuttgart.de

The University of Stuttgart would like to increase the proportion of women in the academic field and is therefore particularly interested in applications from women. Severely disabled persons are given priority in the case of equal suitability.