

# Student research project

## Autonomous Beer Tapping with a Mobile Robot Platform

## Description

The Campus Brauerei (https://www.brauerei.uni-hannover.de/de/) was created as a project from the mechanical engineering campus. In the future, beer will be served autonomously in the taproom on our campus. For this purpose, mobile robots are suitable, which can pour the beer into glasses and serve it to the guests at different tables. The goal of this project is that the robot (Kuka KMR iiwa) autonomously pours a beer into a glass at the tap.

#### **Tasks**

- Literature review on automation of beer tapping
- Familiarization with robot platform
- Conception and design of an actuator to control the tap
- Communication between robot and the tap controller
- Design of a glass holder
- Implementation of a motion controller for the whole tap process







Contact
Tim-Lukas Habich
tim-lukas.habich@imes.unihannover.de
0511-762-4121

### Requirements

- Independent and dedicated work
- Very good result in Robotics I
- First experience with ROS

# Start As of now