VolksBot®

Construction kit for physical Rapid Prototyping of mobile Robots

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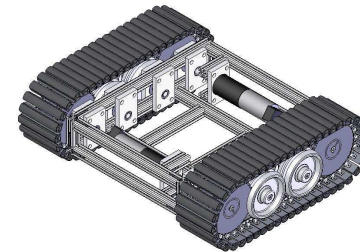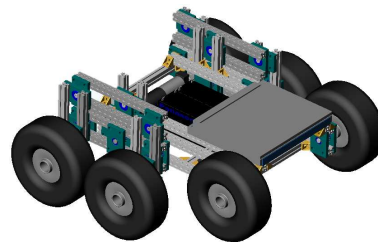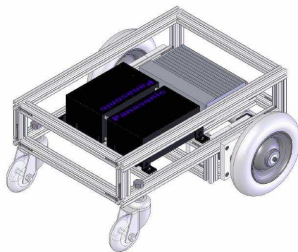
VolksBot® RT

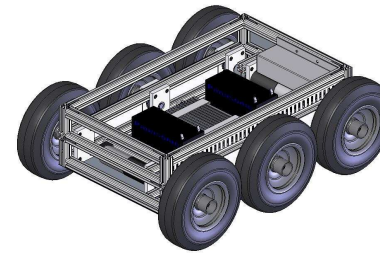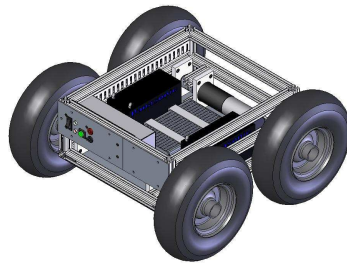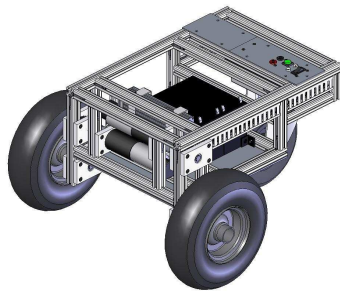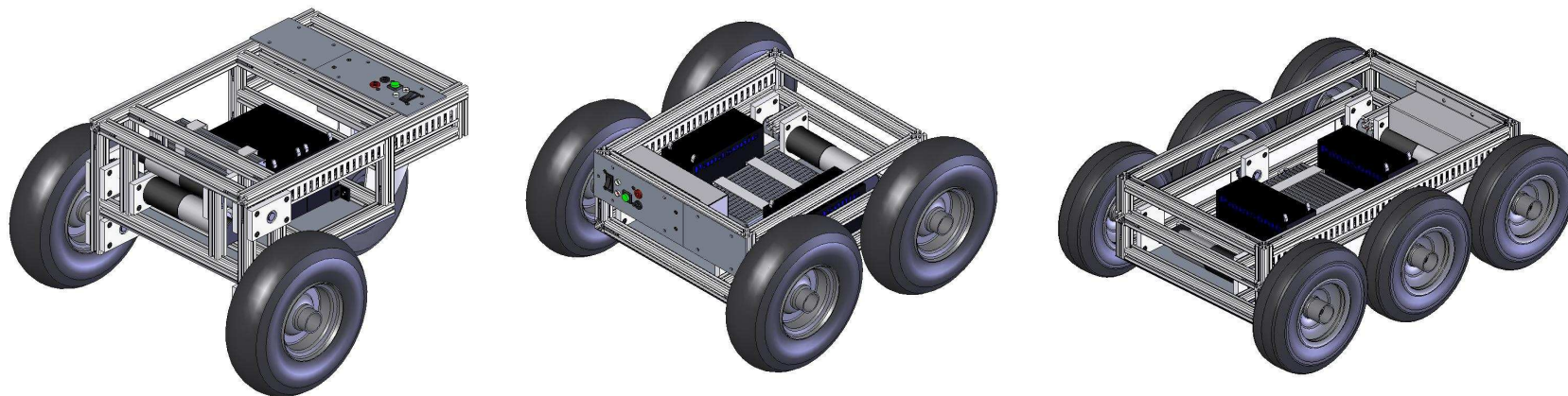Development of a construction-kit for indoor and rough
terrain and high payload

Scalable variants by use of common components

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# Robot Prototyping with VolksBot® RT

Extension of the VolksBot robot construction kit with a new steering unit:
Rapid-Prototyping of a VolksBot with an Ackermann steering unit

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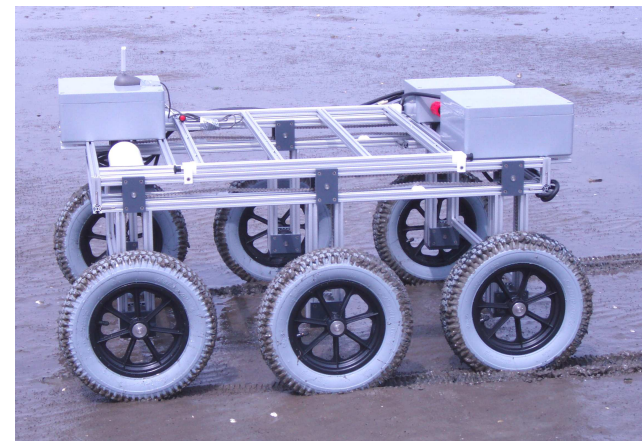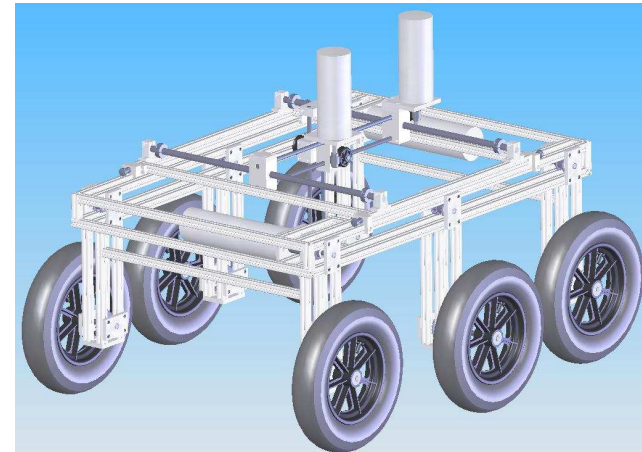Intelligente Analyse- und
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VolksBot® Indoor: Prototyping Service Robots

- VolksBot Indoor serves as base platform
- Extension for RoboCup@Home Service Robot Competitions
- Integration of actors and sensors as Laserscanner, Stereo Camera, 5 dof Manipulator etc.
- World Champion in the RoboCup@Home Competition 2009 based on VolksBot ("Johnny" of Hochschule Bonn-Rhein-Sieg)
- Integration of new components (Dynamaid from Univ. Bonn, Innovation award winner in the RoboCup@Home competition 2009)
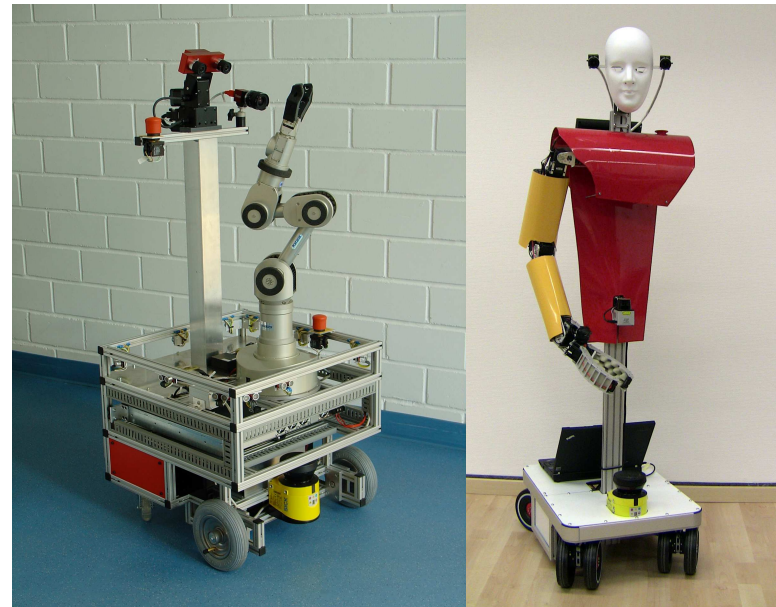
MarBot – Autonomous Underwater Robot

- Based on VolksBot RT concept

- Autononomous sea bed analysis with a 3 DOF Manipulator

- (Semi-)Autonomous Navigation with GPS

- Developed in cooperation with the Alfred Wegener Institute for Polar and Marine reseach

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BrennBot –A Fuel Cell powered VolksBot

- Designed in cooperation with Fraunhofer ISE

- Development of an inspection robot with a fuel cell as energy source
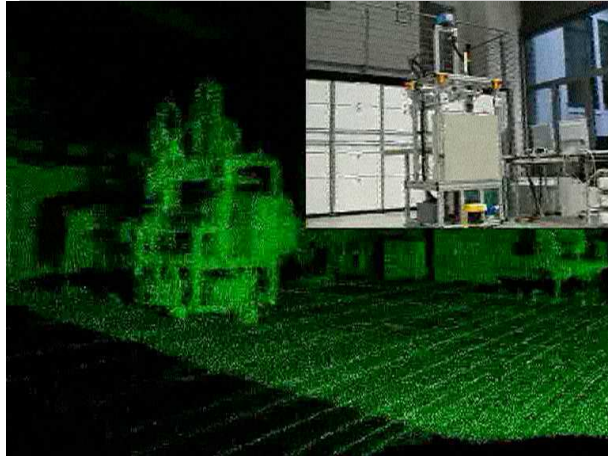
- Robot operation times: up to 24h
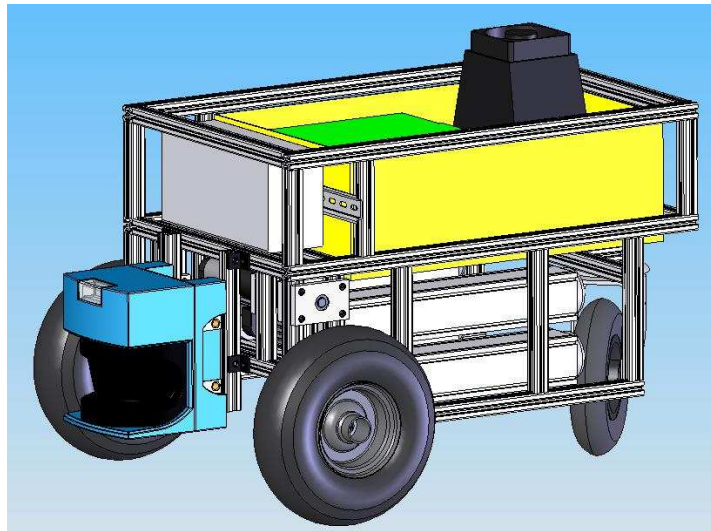
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VolksBot® XT – Increasing Mobility

Use of VolksBot RT components to build a variant for eXtreme Terrain: stair-climbing robot
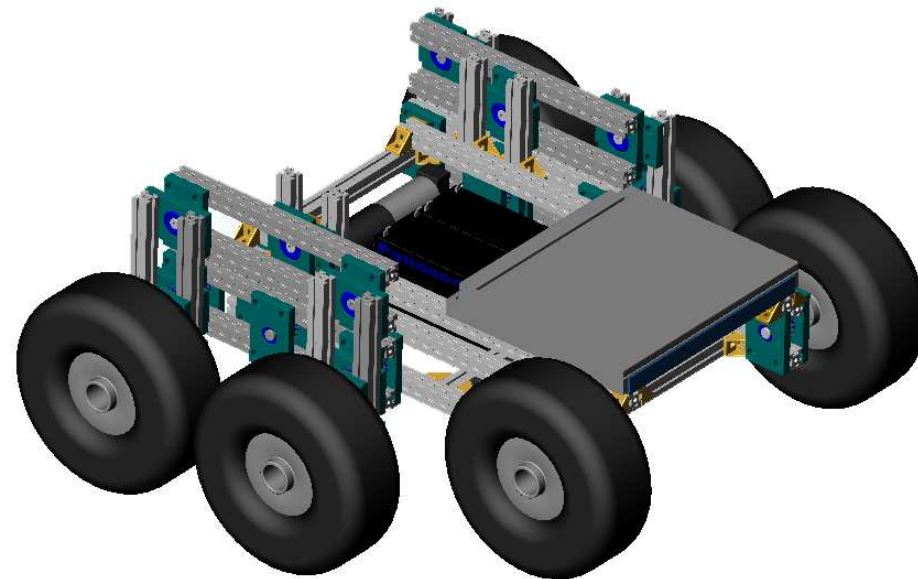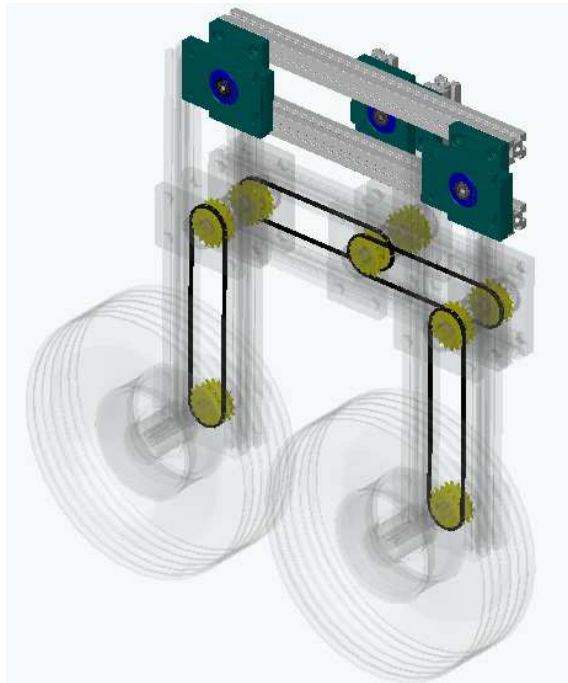
VolksBot® with 3D-Laserscanner

- 3 DLS mounted on VolksBot RT6

- Swivelling or continuously rotating 3DLS

- Scanning in 2D or 3D

- Mobile object-scanning

- Robot-self-localization and obstacle-avoidance

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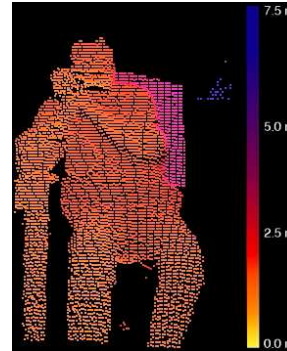Intelligente Analyse- und
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Additional Sensors

Mini-3D-Scanner (Hokuyo)

3D-Camera Swiss Ranger (CSEM)

Swivelling (Infrared-) Camera

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www.volksbot.de