

Team Information



Please provide the following information. We will require it for internal use. No personal information or data, apart from the team image and name will be shown on our website or disclosed elsewhere.

Team Name	UltraSonicForkLift	Table #	11
Sponsors challenge	BLG		

List of Team Members

#	Name	Registration #
1	Jan Möhlmann	
2	Julian Michaelis	
3	Jesko Edzards	#835862453
4	Jeffrey Bissel	
5	Johannes Ganser	#792320807
6	Kai Gerdes	
7	Florian Jacobsen	#819543239
8	Lukas Tiefensee	#834020736

Description of your Project (please include used technologies & platforms)

With this project the BLG challenge should be solved. The idea is to measure the time in which a fork lift drives loaded or free.

To do this an *Arduino Uno* with some sensors is mounted on the fork of the truck. The Arduino Udo measures with an ultrasonic sensor if the fork of the truck is loaded.

This timed information is send in real time to a cloud running on a *Raspberry Pi*. If the Arduino is offline the data is cached and send later. Also the information saved permanently in case the Arduino powers of for some reason. For this case the Arduino has a clock to always know the time. Also when it's offline and reset.

A gyro sensor should measure if the fork lift is driving or standing still.

The cloud manags a *mySQL database* from where the data can be displayed on a website.

Filter, analytics and other data processing is planed. On this bases optimization suggestion can be displayed.