## **Table of Contents**

• power node

• WillyWRT

| Tuble of Contents              |
|--------------------------------|
| 1. Publicity                   |
| 1.1. Stentor                   |
| 1.2. Windesheim newspaper Win' |
| Welcome                        |
| Project Willy                  |
| History of Willy               |
| Project Willy                  |
| • Publicity                    |
| • Sponsors                     |
| Getting started                |
| Development Guide              |
| Driving Willy                  |
| • Documentation                |
| Build of Willy                 |
| Design history                 |
| • Requirements                 |
| Design reference               |
| Physical build                 |
| • Hardware                     |
| Robotic Operating System       |
| • Introduction to ROS          |
| • ROS Tutorials                |
| • Multi master                 |
| Architecture                   |
| Software Architecture          |
| Hardware Architecture          |
| • ROS topic design             |
| Hardware nodes                 |
| • sensor node                  |
| • si node                      |

#### **Components**

- ROS master
- · New ROS master on Lubuntu
- Brain
- Sonar
- Lidar
- Localization and navigation
- Motor controller
- Joystick
- Social interaction
- Speech
- Speech recognition

#### **Radeffect App**

· Radeffect App

#### Lessons learned

- Todo & Advice
- Lessons Learned

#### **Archive**

- Previous Groups
- Research Archive
- Skylab Architecture
- Skylab

# 1. Publicity

### 1.1. Stentor

Jesse Bouwman got in touch with a editor of the Zwolse courant de Stentor. After some email contact we planned a meeting to have an interview about Willy and the background of Willy. Joep Boerboom came and we have had some nice conversations about Willy and the future of our robot. The article and the photo of Willy can be found on the website of de Stentor:

https://www.destentor.nl/zwolle/studenten-windesheim-maken-pratende-schoonmaakrobot~aa713925/

# 1.2. Windesheim newspaper Win'

After the article from de Stentor we got response from the Win' newspaper by email. The Win' crew read our article and they became interested to write something about Willy too. After some email

contact we planned a meeting and gave an interview. Also the photograph took some pictures of our Willy. The article can be read on the following web page.

https://www.hogeschoolkrantwin.nl/2018/05/17/afvalrobot/