

Cogito, Robotour 2012

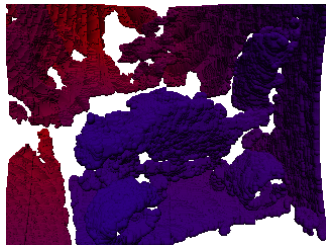
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Team

Roots:

- Short Circuits
- Cogito MART
- (Siraël)
- Eduro



Hardware::Platform

- 1:5 scale RC car
- brushless motor

Hardware::Sensors 1/2

- Encoder: AS5040 magnetic encoder
- Gyro: ITG3200 (?), three-axis
- Accelerometer: BMA180, three-axis
- Sonar: SRF08 (Note: Had to set an extremely low gain.)

Hardware::Sensors 2/2

- GPS : ublox-6
- Compass: cmpr10, tilt-compensated
- Camera: Reptec, IP (inc. wifi)
- Depth sensor: Asus Xtion (unplugged)

Computers

- Arduino Duemilanove (ATMega328)
- Gumstix Overo Fire (arm7, 720 MHz, 256 MB RAM, NEON FPU)
- (Pocket wifi router by Asus)

Software::Operating system

- Kernel: Linux 3.26 (?) in RT_PREEMPT mode
- Userspace: Debian hardfp (w/ FPU support)

Software::AI

- Lot's of code (Python, C++, C)
- No software

?

