

Rescue B

Software

- Custom Operational System for ARM Cortex
- Complete Object Oriented software
- 2D Simulator
- Custom, simple particle filter and Kalman Filter
- Custom powerfull heuristic for solving maze
- Vector based Victim detection

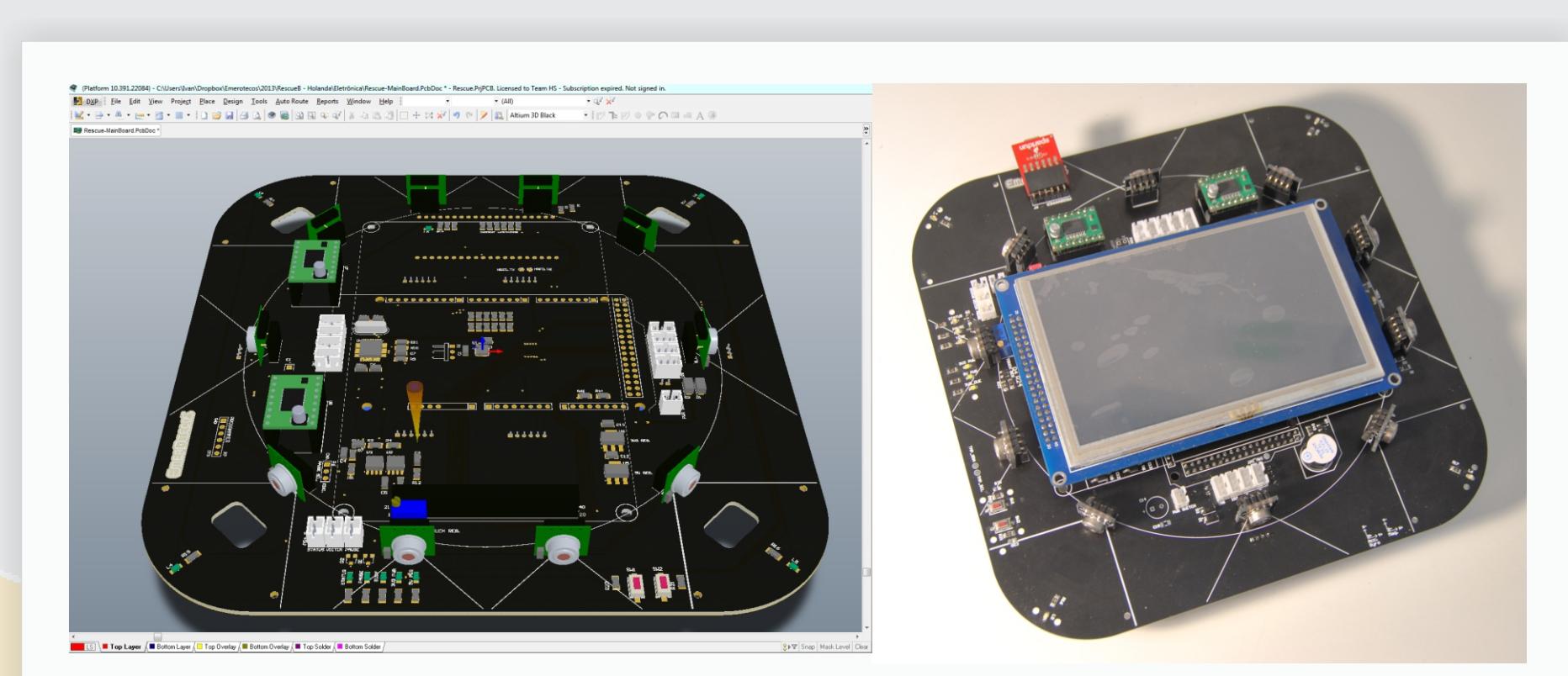
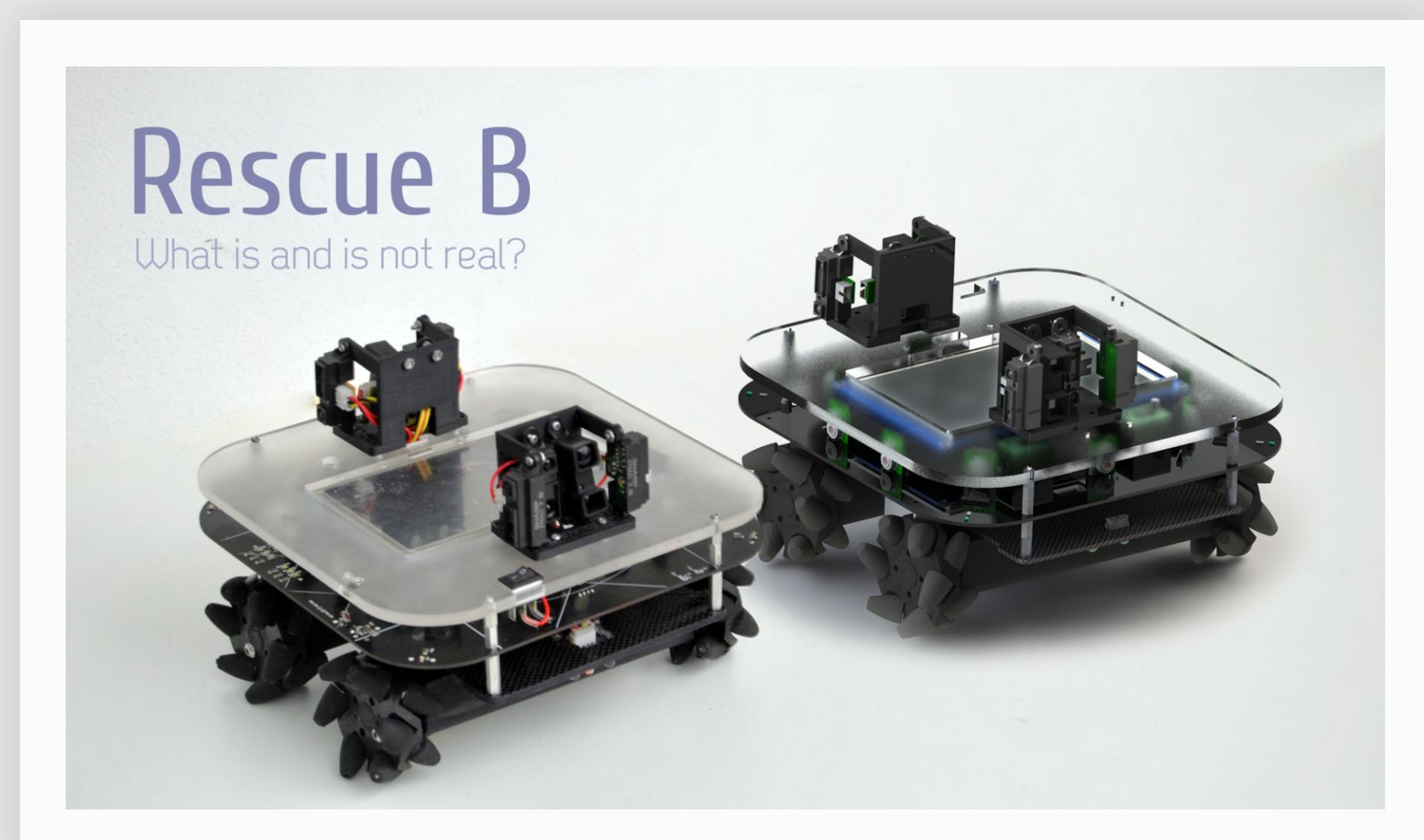
Electronics

- | | |
|----|--|
| 8 | Infra-red Distance Sensor |
| 10 | Infra-red Temperature Sensor |
| 2 | Active Light sensor |
| 1 | 9 axis IMU with Sensor Fusion, Quaternion output |
| 1 | 5" TFT LCD 800x480 with Touch screen |
| 1 | Serial Bluetooth |
| 2 | ARM Cortex M3 - 100Mhz |
| 1 | Atmega328 - 16Mhz |

Mechanics

- | | |
|------|--|
| 100% | Developed and simulated in SolidWorks |
| 4 | Mecanum wheels |
| 4 | High torque, fast, 2500 ticks per revolution motor |
| 2 | Passive suspensions |
| 4 mm | Carbon fiber with Triaxial Kevlar Chassi |

Pictures



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