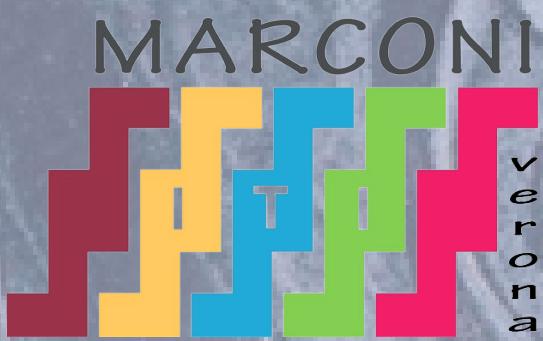


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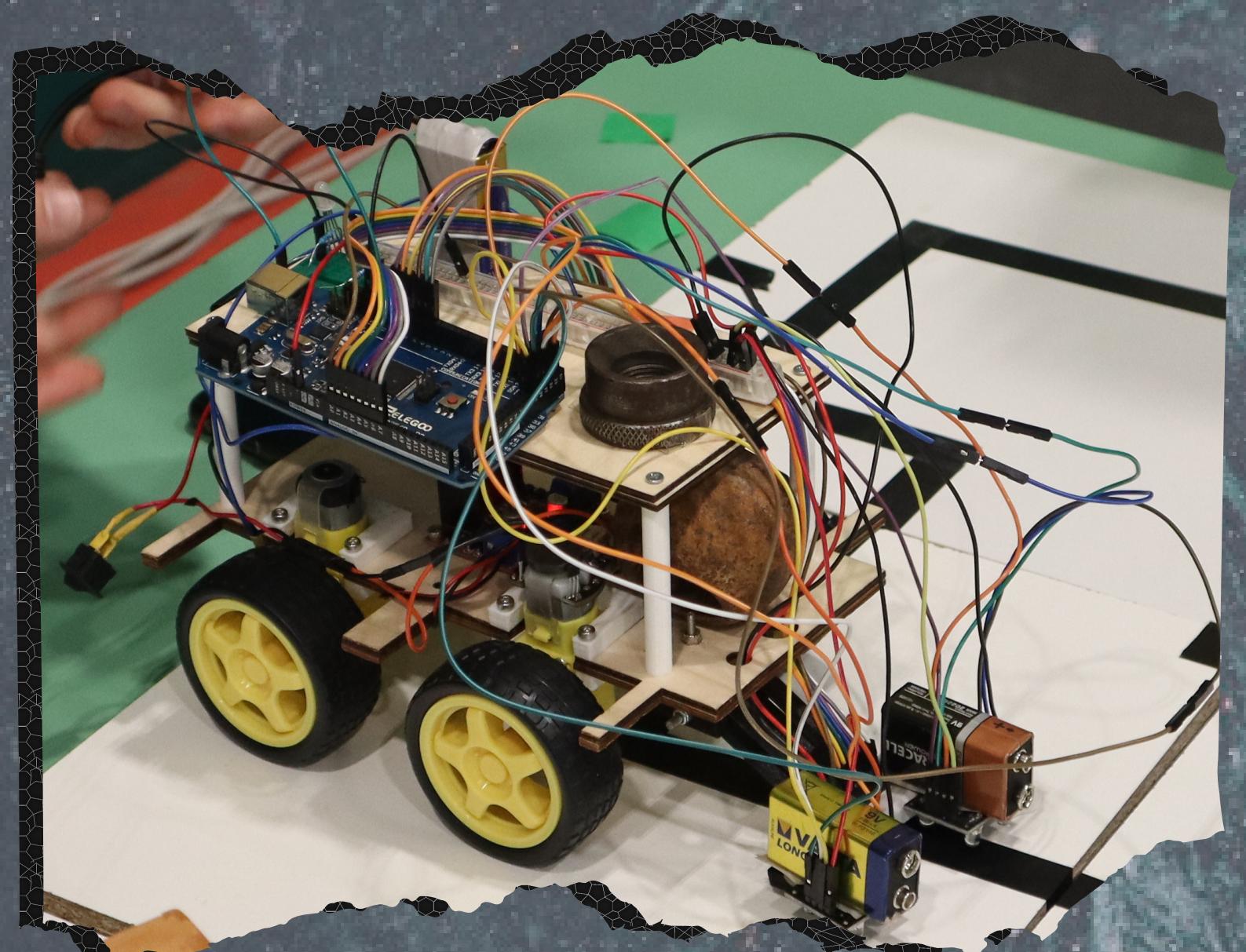
RoboCup Junior Rescue Line - Verbania 2024

Team members:

Palumbo Antonio (Team Leader - Software)
 Marin Rafael Florentin (Hardware)
 Lovato Loris (Software & hardware)
 Lonardi Samuele (3D designer)

Supervisors:

Ciresola Federico
 Boscaini Maurizio
 Rigato Alberto
 Zenari Michele



Components:

A 2 levels chassis moved on 4 wheels, 2 DC engines (with encoder) and two without gearbox, a QTR-8 sensor, 2 TCS230 color sensors, a L298N motor controller, various supports in 3D and everything connected by cables.

```

Initialize QTR-8 sensor list
Initialize color sensors
Initialize PID

Start loop
    If right color sensor sees GREEN
        Disable PID
        Turn right
        Enable PID
    If left color sensor sees GREEN
        Disable PID
        Turn left
        Enable PID
    If both left and right color sensors see GREEN
        Disable PID
        Turn 180°
        Enable PID
    If QTR-8 sees black
        If on the right
            Adjust PID to move right
        If on the left
            Adjust PID to move left
        If in the center
            Go straight
        If slightly off-center
            Adjust PID to bring robot back to center
    End loop
  
```

