

COMPANY MEMBERS



- Caner TOL
R&D Manager
- Ali Birkan DONMEZ
Chief Executive Officer
- Ayça YILDIRIM
General Secretary
- Yunus DEMIROREN
Project Manager
- Gökhan SOYLUKAN
Vice President

WHAT MAKES US SPECIAL

Capabilities

- ✓ Remote Control from any place with Cellular Connection
- ✓ Web Interface
- ✓ Kicking and Dribbling Systems
- ✓ Flex Control with Holonomic Drive
- ✓ High shooting range

Properties

- ✓ Unique design
- ✓ Compact body
- ✓ Easy to assemble and dissemble
- ✓ Wide angle of view
- ✓ Minimal space
- ✓ Speed control
- ✓ 8 direction motion
- ✓ 30+ minutes operation time

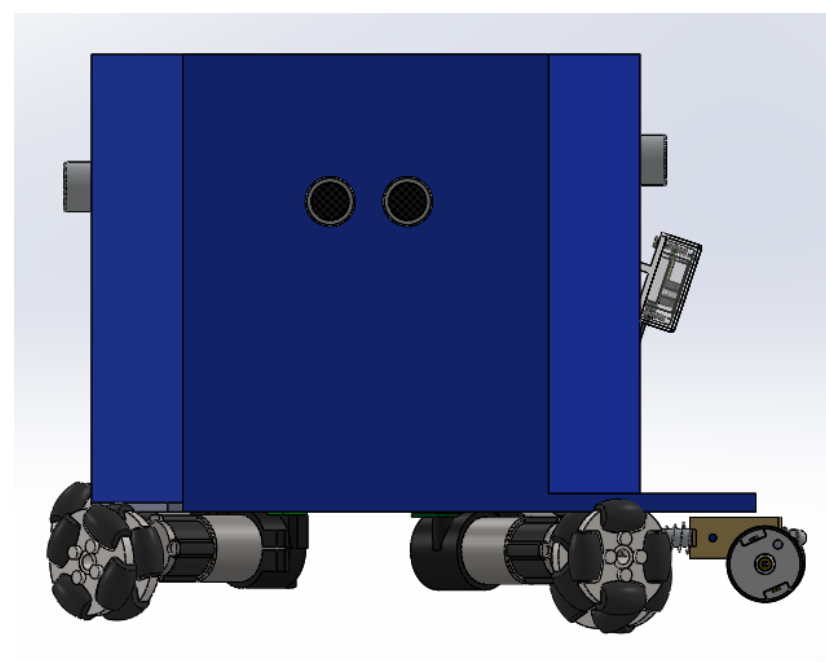
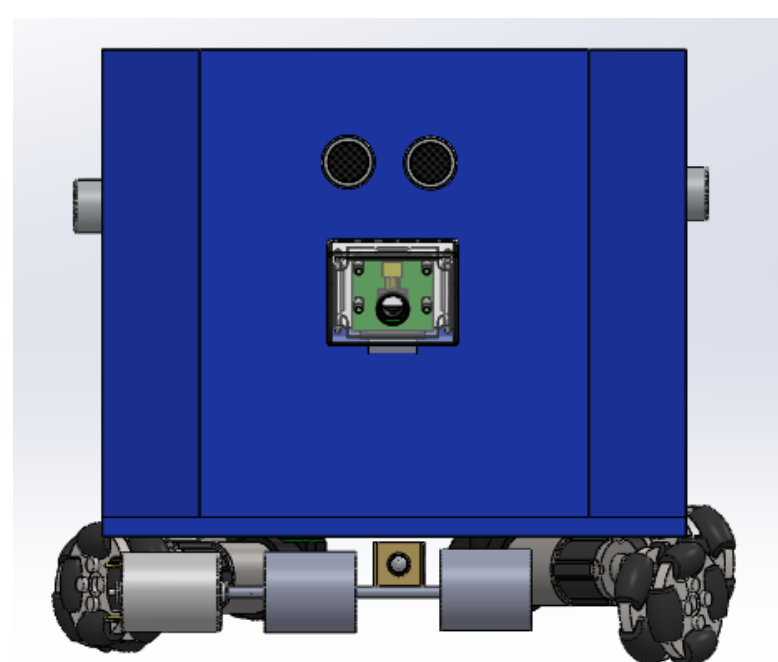
TECHNICAL SPECIFICATIONS

Customer Requirements

- ✓ Easy to use
- ✓ Rigid
- ✓ Compact design
- ✓ Warranty
- ✓ Low-cost
- ✓ Easy to fix
- ✓ Robustness

Engineering Requirements

- ✓ Completely self-contained
- ✓ Smooth movement
- ✓ Angle of view: 91.2°
- ✓ Robot dimensions: 24cm x 19.5cm x 18cm
- ✓ 2 meters shooting range
- ✓ Average power demand: 10.2 W
- ✓ Peak power demand: 22.2 W



PROJECT DESCRIPTION

Design and construction of a teleoperated robot trying to shoot and score in opponent's goal.

REQUIREMENTS

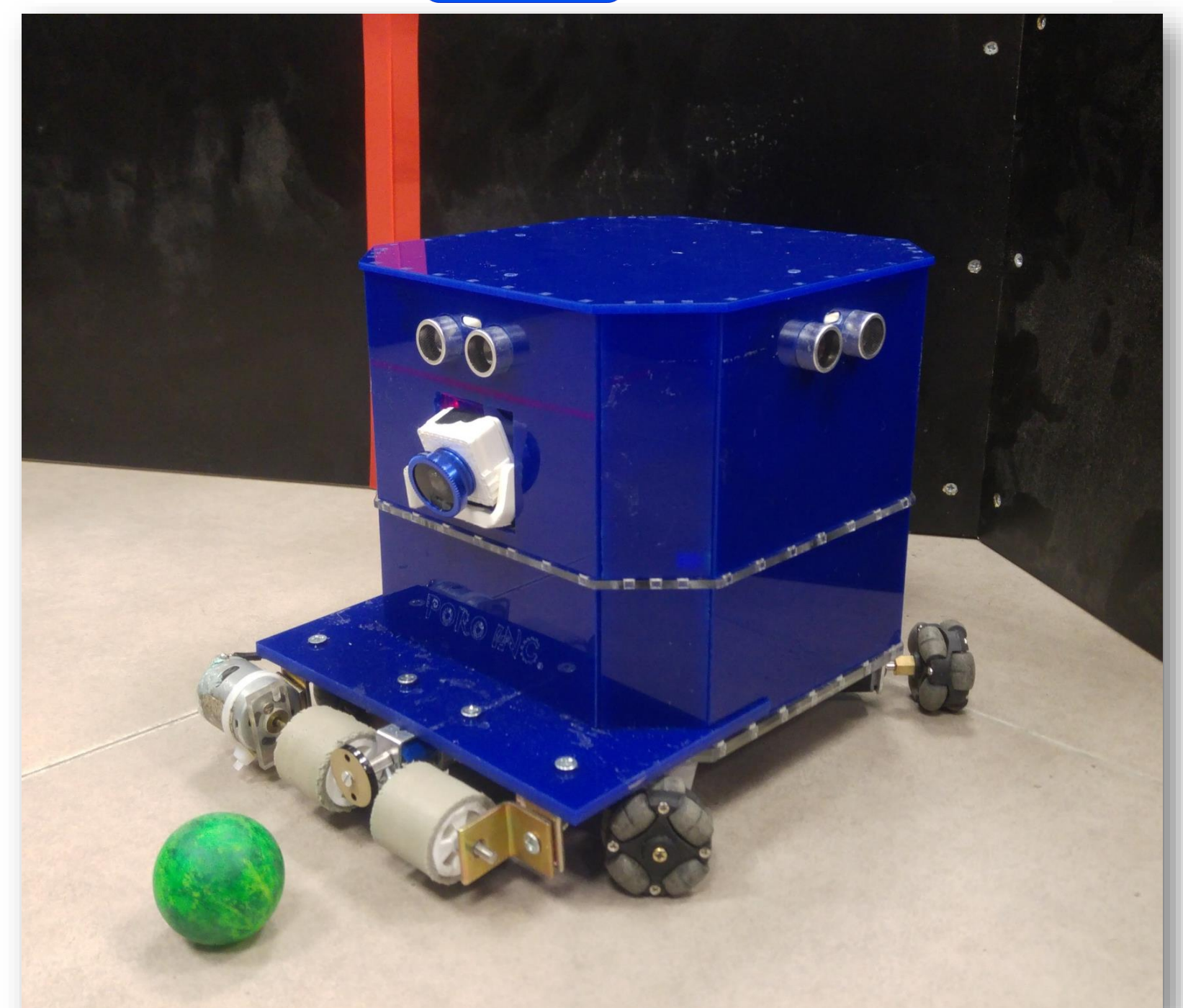
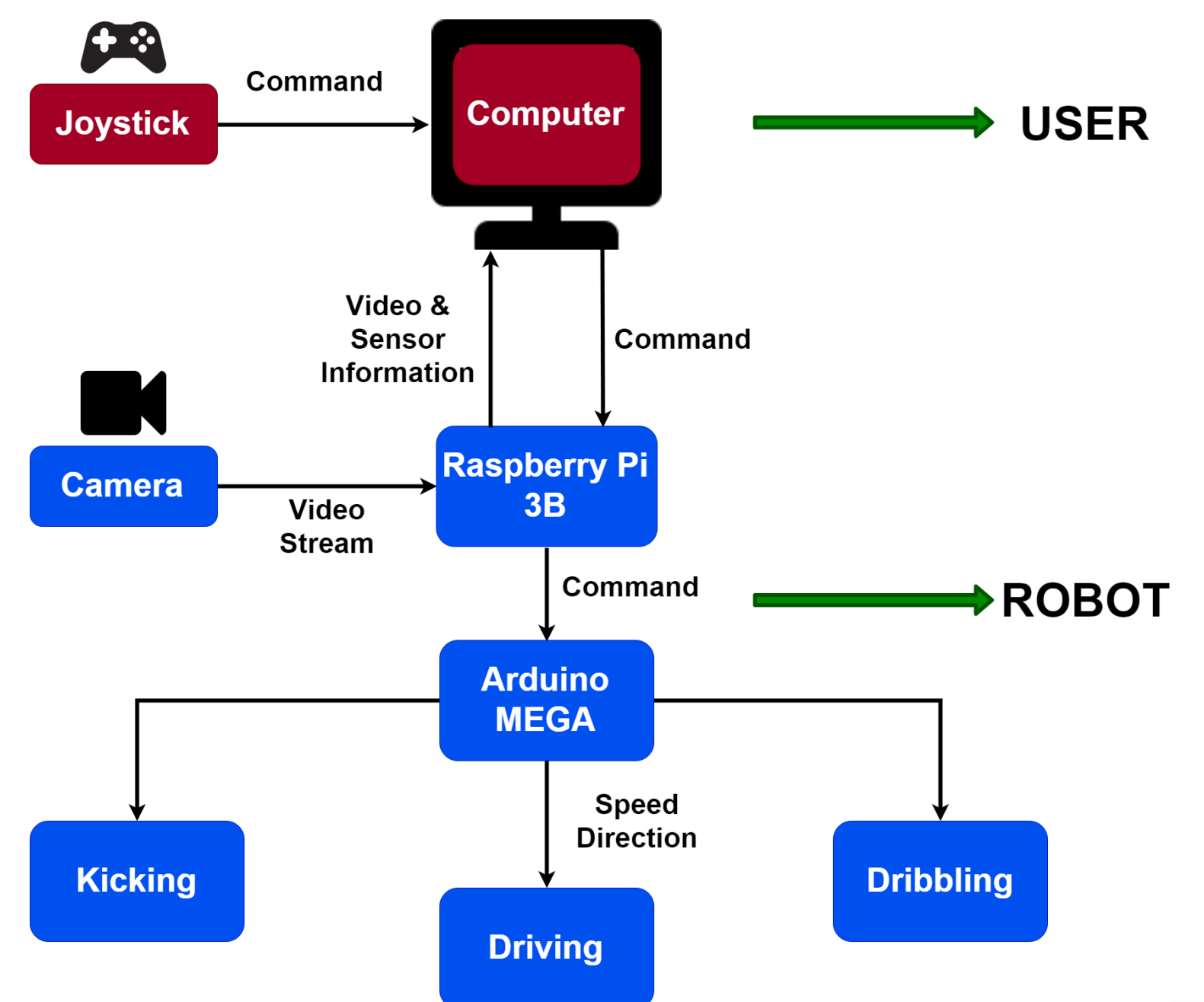
➤ Communication Requirements

- Remote control from 30 meters distance
- Optimal streaming delay (less than half seconds) to play the game properly
- Response time with less than 20 seconds to send the ball to the opponent's game field

➤ Mechanical Requirements

- Strong enough to shoot and score in opponent's goal
- Fast enough to follow and save the ball that comes from the opponent

METHOD OF SOLUTION



DELIVERABLES

Name	Pcs.
➤ Rechargeable Battery	1
➤ Battery Charger	1
➤ Game Ball	1
➤ Wall of the Play Field	3
➤ GUI Application	1
➤ Warranty, User Manual	1

BUDGET

Name	Pcs.	Cost (\$)	Name	Pcs.	Cost (\$)
▪ Raspberry Pi 3B	1	33	▪ L298N Motor Driver	3	7.5
▪ Arduino MEGA (Clone)	1	6	▪ 3G Dongle Modem	1	7
▪ Raspberry Pi Camera	1	5	▪ SIM Card	1	11
▪ Ultrasonic Sens HC-SR04	4	4	▪ Chassis materials	N/A	10
▪ Brushed DC Motor	1	1	▪ Deliverables	N/A	61
▪ Encoder DC Motor	4	40	TOTAL		185.5 \$