



SENTINEL

AUTONOMOUS DISCOVERY VEHICLE



HAVELSAN
SUIT

2025 FINALIST

SENTINEL IS AN AUTONOMOUS VEHICLE THAT EXPLORES HAZARDOUS ENVIRONMENTS BY GENERATING 2D – 3D MAPS USING SLAM AND DETECTING OBJECTS IN REAL-TIME. IT DISTINGUISHES BETWEEN STATIC AND DYNAMIC OBSTACLES, ENABLING SAFE PATH PLANNING IN DANGEROUS AREAS LIKE WAR ZONES OR CONTAMINATED SITES. SENTINEL OPERATES AUTONOMOUSLY WITH THE VEHICLE MODELLED IN A COMPUTER ENVIRONMENT. IT WORKS EFFECTIVELY BOTH IN A SIMULATION ENVIRONMENT AND IN REAL LIFE. FURTHERMORE, SENTINEL IS INTEGRATED A USER INTERFACE WITH CONTROL PANELS, ADVANCED REPORTING AND LOG SYSTEM.

OUR FEATURES:

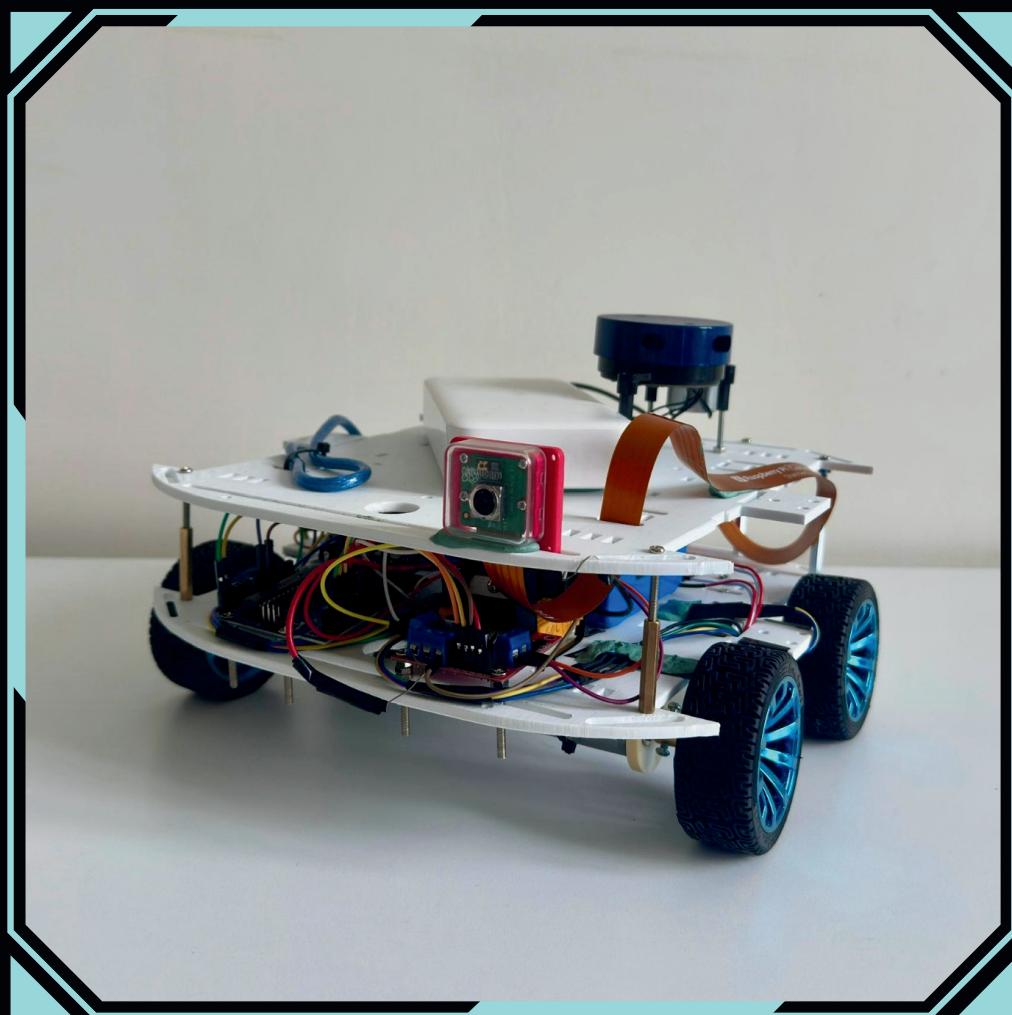
- ✓ REAL TIME COMPATIBILITY
- ✓ MANUAL & AUTONOMOUS MOVEMENT
- ✓ 2D & 3D MAPPING
- ✓ OBJECT DETECTION WITH PATH FINDING
- ✓ WEB INTERFACE
- ✓ ENHANCED REPORT GENERATION SYSTEM
- ✓ SIMULATION MODE



OUR TEAM



SENTINEL



MAPPING

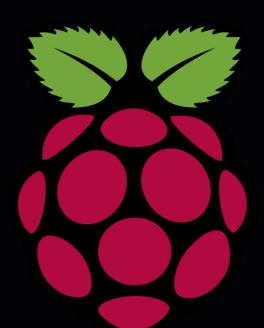
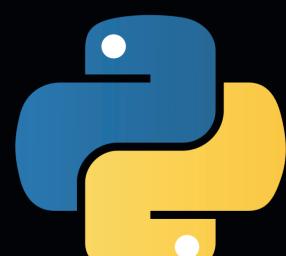


WEB INTERFACE

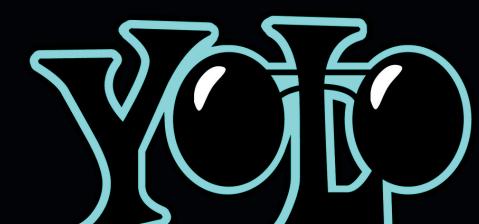
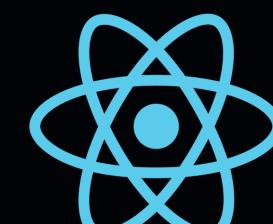


BURAK ATEŞ - TURGUT UTKU ALTINKAYA - YUNUS EMRE DİNCEL - İLTERİŞ SAMUR - BAYRAM ALPER KILIÇ

ADVISOR: ASSIST. PROF. DR. SERDAR ARSLAN



ROS





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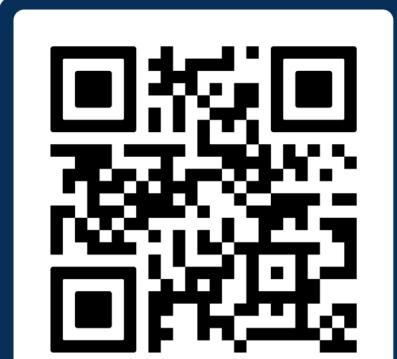
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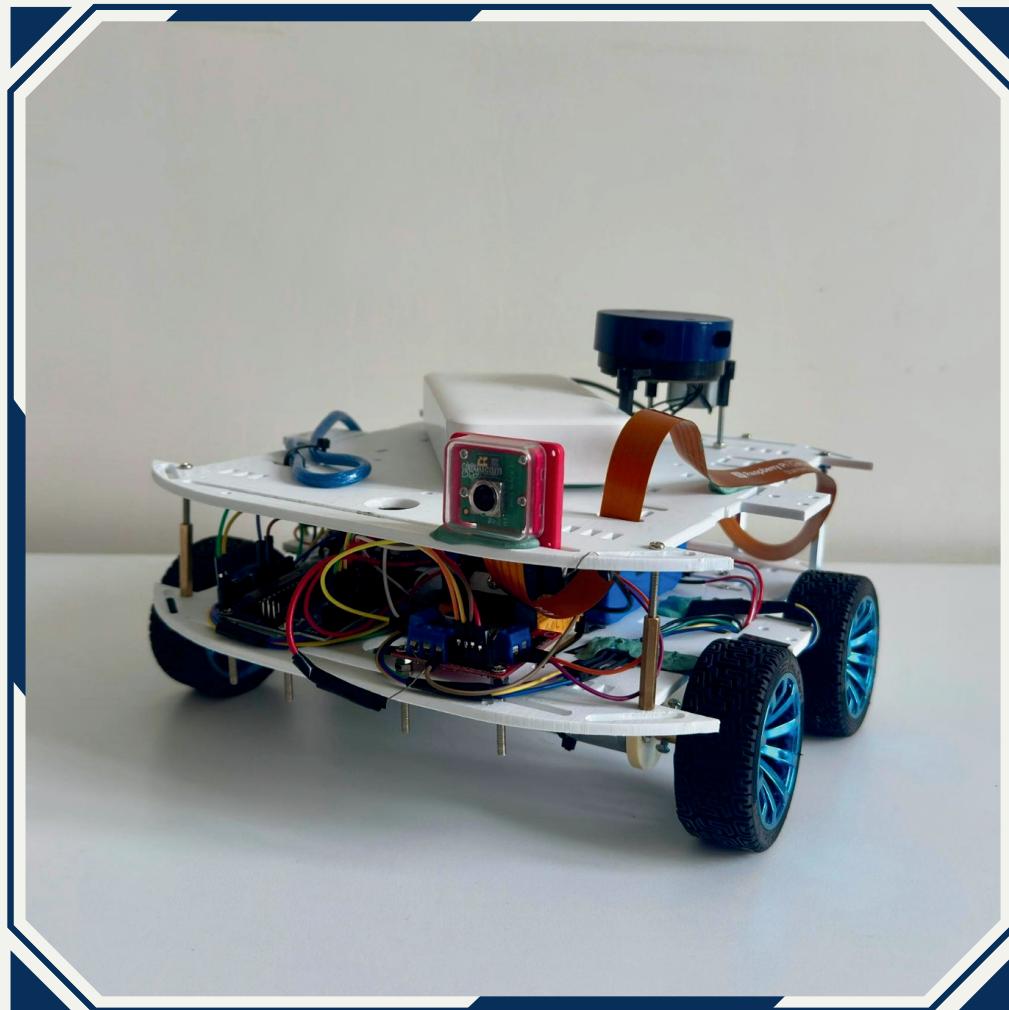
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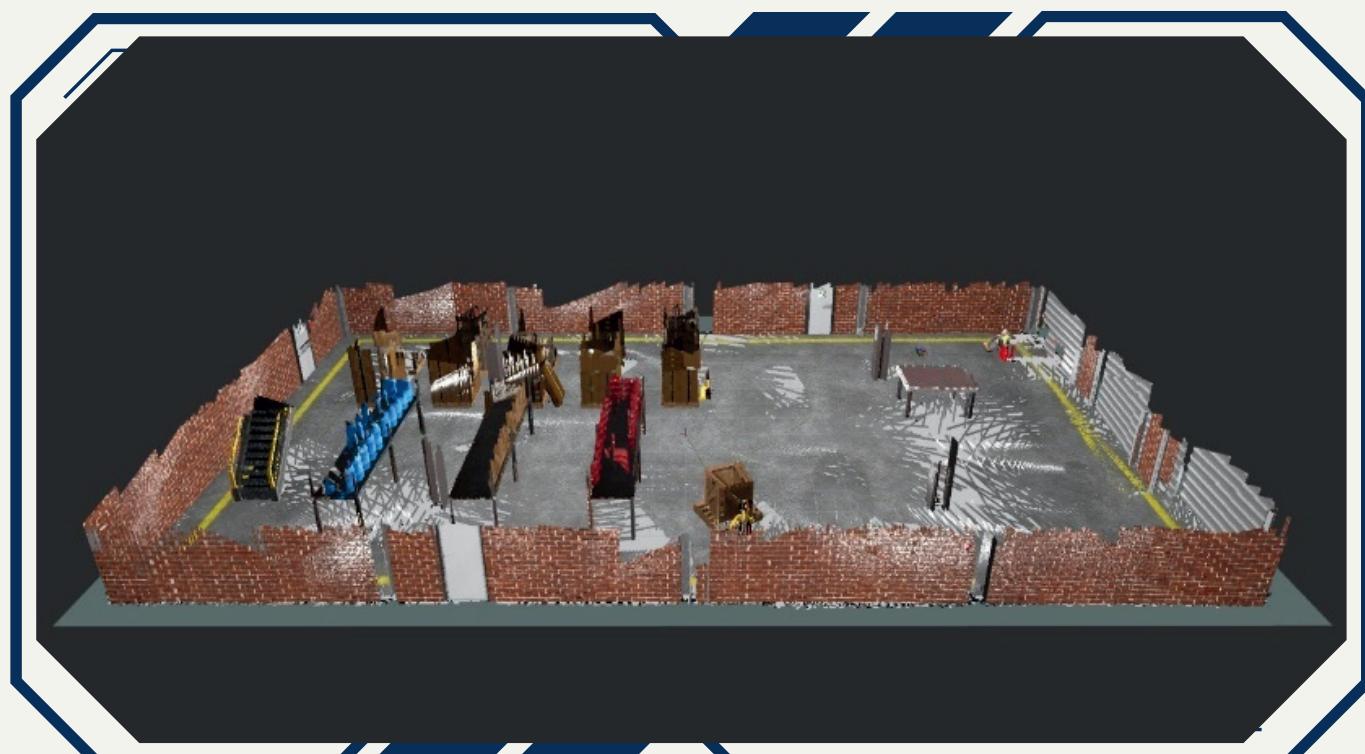
OUR TEAM



SENTINEL



MAPPING

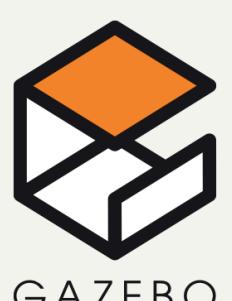
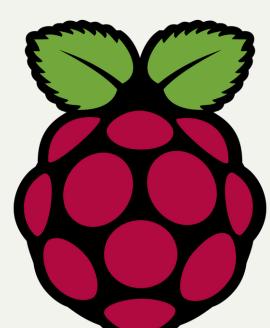
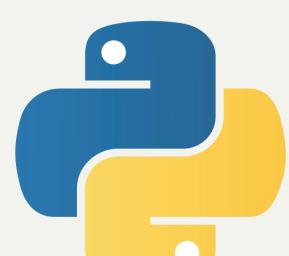


WEB INTERFACE



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