Gesture controlled rescue hexapod robot

Introduction

Disaster-affected areas are filled with debris, unstable ground and inaccessible locations. Trying to search, rescue or navigate through these areas can be tough due to this reason. We propose developing a gesture controlled hexapod robot that can navigate through these rough terrains and help with rescue missions. The robot can be remotely controlled using hand gestures and includes a ~~love~~ video feed for operation.

Objectives

We aim to use our six legged robot, improve our gesture control device, and integrate an ESP32-CAM module for real-time video streaming to assist rescuers. We want to add obstacle detection and avoidance to improve navigation. Use indicators to detect location of robot, hazards and survivors.