

STEVE Mk.1 - AI Tactical Helmet Prototype

About the Project

STEVE Mk.1 is an AI-powered tactical helmet prototype developed by Fateh, a 9th-grade student passionate about defense technology and artificial intelligence. The helmet is designed to enhance battlefield situational awareness using real-time object detection, voice assistance, and computer vision.

Built with a Raspberry Pi, camera module, and a lightweight AI model, STEVE Mk.1 is inspired by the idea of integrating modern tech into field-ready military gear. The goal is to assist soldiers in identifying threats, navigating terrain, and receiving instant intel - all hands-free and on the move.

Key Features

- Real-time object detection using computer vision
- Voice-activated AI assistant for commands
- Wide-field camera input for battlefield view
- Modular design for further sensor integration (GPS, thermal, etc.)
- Lightweight, Raspberry Pi-based embedded system

Mission & Vision

This prototype is part of a long-term vision to build affordable, effective, and indigenous defense tech solutions for the Indian Armed Forces. With guidance and mentorship from organizations like DRDO, this project hopes to evolve into a real-world deployable solution for frontline soldiers, special ops, and tactical teams.