



Why Use FallGuard

OUR PROJECT, FALLGUARD, IS A CUTTING-EDGE AI-POWERED FALL DETECTION SYSTEM DESIGNED TO ADDRESS THE ALARMING ISSUE OF WORKPLACE FALLS. ACCORDING TO INJURY FACTS, 865 WORKERS TRAGICALLY LOST THEIR LIVES IN FALLS IN 2022, AND HUNDREDS OF THOUSANDS WERE SERIOUSLY INJURED, REQUIRING SIGNIFICANT TIME OFF WORK. NOTABLY, 144 FATALITIES OCCURRED DUE TO SAME-LEVEL FALLS, PROVING THAT EVEN NON-HEIGHT-RELATED ACCIDENTS CAN BE FATAL.

FALLGUARD LEVERAGES ADVANCED DEEP LEARNING TECHNIQUES, SPECIFICALLY YOLO-BASED OBJECT DETECTION, TO MONITOR WORKERS IN REAL TIME. BY DETECTING BOTH HIGH-LEVEL AND SAME-LEVEL FALLS, THE SYSTEM ENSURES COMPREHENSIVE COVERAGE. IT PROVIDES INSTANT ALERTS TO SUPERVISORS OR MEDICAL TEAMS, ENABLING SWIFT RESPONSE TO POTENTIALLY LIFE-THREATENING SITUATIONS. THIS CAN SIGNIFICANTLY REDUCE THE SEVERITY OF INJURIES AND IMPROVE SURVIVAL RATES.

FURTHERMORE, FALLGUARD CREATES A VALUABLE DATASET OF INCIDENT REPORTS, ALLOWING EMPLOYERS TO IDENTIFY HIGH-RISK ZONES AND IMPLEMENT TARGETED SAFETY IMPROVEMENTS. BY ADDRESSING BOTH THE IMMEDIATE AND LONG-TERM SAFETY NEEDS OF WORKPLACES, FALLGUARD HAS THE POTENTIAL TO SAVE LIVES, REDUCE INJURIES, AND CONTRIBUTE TO SAFER, MORE PRODUCTIVE ENVIRONMENTS.



Project by
Aman Kumar(CSE(IOT))