PROJECT GARUDA

UAV with Advanced Human Tracking and Enumeration Technology

Abstract:

Search and rescue missions during and after disasters require all efforts and high financial expenses. Rapid locating of wounded and lost individuals contributes in directing the rescuers and medical teams. This may increase the probability of saving human lives and plays a significant role in reducing expenses. Currently, the use of unmanned aerial vehicles (UAVs) or drones for remote surveillance and reconnaissance is becoming increasingly popular. On the other hand, emergent artificial intelligence (AI) algorithms based on convolution neural networks (CNN) reveal the ability of real-time detection. Combining the high-performance detection and classification capabilities provided by emergent AI techniques with the exploratory abilities of UAVs allows the UAVs to process the captured sequence of images and report back results in real-time. The evolution of AI-assisted UAVs enables the detection of wounded and trapped persons while flying and allows proper and fast transfer of information to ground stations to lead the rescuers and medical teams to victims' locations. In this paper, we explore augmenting UAVs with processing units executing emergent AI-based detectors. The proposed system can detect humans in real time and send the corresponding coordinates to the ground station.

Batch Members

S.No	Register Number	Name of the Student
01	513520104009	HEMA HARIHARAN .S
02	513520104012	JEEVANANDHAM .S
03	513520104014	KABILAN .V
04	513520104043	WASEEMULLAH .K