Fires from commerce and recreation to military and



Fires are the most frequently occurring accidents, with diverse causes, frequent destruction of buildings, and high threats to human safety. For example, forest fires usually occur in hot, dry areas that do not get much rain. They can break out when the trees and the ground get really dry and hot. Sometimes lightning strikes the trees and starts a fire that could spread for miles. They spread quickly lighting trees, brushes, grass, and houses. They can most easily spread in the forest area.

Facing wildfires can be very dangerous and is not recommended. The Fire and Rescue Services responded to a multiplicity of events such as major disasters, large building fires, Hazmat incidents and environmental events such as flooding and forest fires, and in doing so, they have a range of tools and equipment that they can call on to assist in the firefighting effort. With a fast response time and increasing sensing capability, drone technology is fast becoming an integral part of that toolset. Drones are an emerging technology that is revolutionizing a variety of applications, from commerce and recreation to military and safety cite{Faisal}. For rescue operations, the fire department needs to gather information about such vulnerable people, in addition to information about the damage situation in the affected area. Using drones to gather this information is more efficient and safer than gathering the information manually. A drone can be used for fire detection, intervention monitoring, and also for post-fire monitoring cite{Restas}. The focus of this research is how to increase human safety because even if we have conducted evacuation drills when a disaster strikes, it can be difficult to guarantee human safety because fires are such unpredictable events.

This is especially true for vulnerable persons, such as old persons, differently abled persons, small children, and babies, who are prone to receive damage. This research will combine the current technology of drones with a prototype application that can gather information about victims of a fire accident. Drones are an emerging technology that is revolutionizing a variety of applications, from commerce and recreation to military and safety.