


Research Under Department

SL	Title	Research Area	Publication URL	Research Image	Short Description
1	A New Localization scheme for helicopter landing based on combined optical communication and photogrammetry for enhancing safety	Dhaka	N/A		<p>The purpose of this Thesis is to improve safety by proposing a localization scheme based on free space optical communication systems for Helicopter takeoff and landing. In this work, the purpose system is a redundancy to radio communication. Conventional radio communication and navigation systems suffer several challenges such as interference from different electrical signals, bandwidth limitations, weather impacts, obstruction to localizer caused by enormous constructions and airport hangars. The aforementioned difficulties can be improved by the suggested localization scheme. Furthermore, it is immune to electromagnetic signal interference, offers a higher bandwidth, lower latency, increased security, it is less expensive to operate and maintain than RF communication. The design is implemented and tested on a microcontroller based simulator in the computer laboratory with the help of a personal computer. The results show that the proposed design is very effective for operation. These include its low cost, fast response, higher reliability and ruggedness.</p>