A Comparative Study on Unmanned Vehicle for Human Tracking using Face Recognition System: A Review

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Abstract. Similar to pursuing a criminal or looking for a missing child or senior in a crowded area, surveillance is challenging. This review's objective is to offer a solid resolution to the issue. This issue is not clearly resolved in Sri Lanka. Operating autonomous vehicles equipped with facial recognition software is the concept. Over the past few decades, there has been a sharp increase in interest in facial recognition theory and algorithms. Video surveillance, criminal identification, building access control, and driverless and self-driving vehicles are just a few of the specific applications gaining momentum in the industry. Numerous methods have been created, including regional, all-encompassing, and hybrid ones that describe facial images using either a few facial image elements or the complete face feature. Technology advancements have made it possible to create unmanned systems and vehicles for use in the air, on land, and underwater. Unmanned platforms continue to be the focus of various studies and research contributions as their array of applications grows regularly. A person's face (whether they are banned or missing) is first entered into the system, after which a car drives across the area looking for the face until one is found. Send a live notification and the person's location if they are located. This project's use can be broadened to include pattern monitoring, public security surveillance, and observing individuals in enclosed areas like exposition halls. With unmanned vehicles, we can do our tasks quickly and with little manual labour. This white paper explains how sensors and measurements let autonomous human-tracking vehicles with facial recognition algorithms operate correctly.

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