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Ai Surveillance Unmanned Ground Vehicle with Facial Recognition

Hafiz Muhammad Maaz Khan*, Ammar Ahmed, Ashar Khan, Hafiz Muhammad Fahad
Sir Syed University of Engineering & Technology, Pakistan

Security and surveillance is prime focus for any organization that chooses to be safe from any kind of physical threats. Installation of video surveillance systems can cost organizations a big portion of their financial budget and can lead to significant changes in their network infrastructure. The purpose of our research is to minimize the hurdles in setting up the video surveillance system into organizations that has open areas, that cannot afford to let any outsider get into their networks and that need many costly cameras to cover their entire place. By installing cameras on an unmanned ground vehicle (UGV) that can move around in a specified area using geographic coordinate system, by smartly choosing its own path for its automatically generated destinations within the area. The UGV can also be manually controlled by the means of analog transmission within specified range. The video is transmitted using analog video transmitter and can be received over a specific channel using the analog video receiver, and can be observed using the developed software on any computer. The software can smartly identify an employee or an outsider using deep learning model trained on the faces of the employees and can alert the organization on its own when it detects any intrusion. It increased the range of wireless video surveillance and reduced the financial and architectural barriers for installing video surveillance into the organization.

Keywords: Wireless, security, surveillance, unmanned vehicle, analog transmission

Biography

Muhammad Maaz Khan is a student of Computer Engineering department in Sir Syed University of Engineering & Technology, Karachi, Pakistan. He is living, born, raised and educated in Karachi. His desire of research in the field of computer has benefitted him in completing many projects throughout his time in university and now is making final year project in the field of artificial intelligence. He has also participated in many events and competitions and has received several awards and certificates. He aims to make the life easier for the people.

Notes:

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