Abstract

This paper proposes a new approach for infrared object localization and tracking with passive infrared sensors (PIR). The hierarchical architecture visibility of Fresnel lens away is presented with modulated field of view (FOV). The FOVs of lens array in sensor node are modulated to achieve a single degree of freedom (DOF). The energy imbalance problem effectively solve with the PIR system. PIR based system saves power consumption and memory space. Passive infrared system detects the change in the radiation of warm blood generation and completely used to turn On the webcam and lighting system.

References

Infra Red Radiation Detection using Passive Infrared Sensor

of America 66 (4): 339–341. doi:10.1364/JOSA.66.000339. (subscription required (help)). The foveal sensitivity to several near-infrared laser wavelengths was measured. It was found that the eye could respond to radiation at wavelengths at least as far as 1064 nm. A continuous 1064 nm laser source appeared red, but a 1060 nm pulsed laser source appeared green, which suggests the presence of second harmonic generation in the retina.


Index Terms

Computer Science

Information Sciences

Keywords

Passive Infrared Sensors (PIR); Field of View (FOW); style; styling; Degree of Freedom (DOF)