FIRE DETECTION IN BUILDINGS AND FORESTS USING IMAGE PROCESSING

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ABSTRACT

Wildfire is a part of nature. It plays a key role in shaping ecosystems by serving as an agent of renewal and change. But fire can be deadly, destroying homes, wildlife habitat and timber, and polluting the air with emissions harmful to human health. Fire also releases carbon dioxide—a key greenhouse gas—into the atmosphere. Fire effects are influenced by forest conditions before the fire and management action taken or not taken after the fire, and may be long-lasting.Now-a-days we are using sensors,But if we use sensors it might be affected on fire easily so that the exact the information will be lost easily.We are using an CCTV cameras using Artifical intellegence by the method of image processing.The captured image is send to google cloud by using wifi signal,the collected image from the googlecloud is processed by image processing using the library OpenCV,the library used are SMTPLIB & HTTP POST to Twilio message. OpenCV is used in computer vision.By Google Maps we call the API function to get the exact location of the CCTV camera's.By using this technology we are able to detect the fires easily if the fire is spoted on the CCTV camera.Once the fire detected, the call will be automatically remind the nearest fire station.We use this kind of technology's we are able to predict the exact location will be sent automatically to the fire service station.