

Sensor Network Applications in Structures – A Survey

Sanath Alahakoon

Central Queensland University, Queensland, Australia

D. M. G. Preethichandra

E. M. I. Mala Ekanayake

Kyushu Institute of Technology, 2-4, Hibikino, Wakamatsu-ku, Kitakyushu, Japan

ABSTRACT

Sensor networks play a significant role in modern day structures. From large bridges to sky scrapers, application of sensor networks – both wireless and wired – has strengthened the structural reliability and hence the safety of their users. The objective of this survey paper is to identify different usages of sensor networks in structures and further elaborate on different types of sensing together with the techniques associated with processing the parameters sensed by the sensor networks to achieve the desired implementation goals.
