Sensors are currently used in a lot of application areas such as health related application, military application, control and tracking application and habitat monitoring and environment applications. This paper introduces various number of sensor validation schemes in sensor network as an overview in this area. This paper entitles the description of the types of attacks and statement of the motivation for sensor validation in sensor network. Then, it introduces challenges of developing a typical sensor validation scheme for sensor networks which is followed by the major principle requirements of a good candidate sensor validation schemes. State-of-art of sensor validation schemes provided in this paper based on the techniques used in each schemes. Four major techniques of sensor validation are categorized as follows: Data mining, computational intelligence-based, rule-based, statistical-based and game theoretical based. Each schemes in this category is analyzed, showing their advantages and disadvantages. Finally, the survey concludes with presenting recommendations that provide some importance research opportunities in this area for future researcher.


**Index Terms**

Computer Science  Wireless

**Keywords**

Data mining, computational intelligence (CI), rule-based.