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Abstract

Railways are large infrastructures and are the prime mode of transportation in many countries. The railways have become a prime means of transportation owing to their capacity, speed, and reliability. Even a small improvement in performance of railways has significant economic benefits to rail industry. Thus, a proper maintenance strategy is required to govern optimization of inspection frequency and/or improvement in skill and efficiency. Accidents happening due to track breaking have been a big problem for railways for life security and timely management of services. This breakage needs to be identified in real time before a train actually comes near to the broken track and get subjected to an accident. In this paper, different kinds of rail defects inspection and maintenance methods are described and a basic algorithm is readdressed that makes use of wireless acoustic sensors for detecting cracks and breakages in the railway

tracks.

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