**ABSTRACT**

In the present day, it is not uncommon for parents and guardians to worry about the well-being and safety of their child or children. With the advent of numerous technologies, schools that can afford, implement extensive and costly measures to ensure the security of their students. However, such technologies remain inaccessible to the not so wealthy. This paper proposes an efficient and reliable school bus tracking cum safety solution in the form of an android application coupled with a website. The system incorporates location tracking, a simple but fool-proof authentication and notification mechanism, and anomaly detection techniques for raising alerts in case of unusual activity. Such a system allows for the parents to be aware of their child in unprecedented as well as known circumstances. The school authorities are also able to monitor the status of their buses via a website. As additional features to improve the travel, this paper implements route optimization and traffic-based delay prediction.