

Smart College Bus Transportation System Using IoT

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Abstract: *This project enhances the college bus experience through a mobile application that leverages the power of IoT. Students and staff can ditch the guesswork about bus arrival times with the app's real-time GPS bus tracking feature. This translates to less time spent waiting and more flexibility in planning commutes. Furthermore, the system prioritizes student safety through RFID technology. RFID tags track student entries and exits, keeping parents and the college informed of their whereabouts. This combined approach of real-time bus tracking and student monitoring offers a comprehensive solution that improves efficiency, affordability, and overall safety for college bus transportation. The system's scalability paves the way for future expansion to encompass all college buses, creating a centralized tracking network.*

Keywords: RFID, Servo motor, GPS

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