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Research on Advanced Baby Stroller

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Abstract: *In today's fast-paced world, ensuring the safety and well- being of infants in strollers is a primary concern for parents, especially in public spaces. The Advanced Baby Stroller is an IoT-enabled smart stroller designed to provide real-time monitoring, security, and enhanced convenience for childcare. This innovative system integrates a Bluetooth module to establish a connection between the stroller and the parent's device, continuously monitoring the range. If the stroller moves beyond a predefined distance, a buzzer alert is triggered, and electromagnetic locks automatically engage to prevent unauthorized movement. To ensure the child's presence and safety, an ultrasonic sensor detects whether the baby is inside, while a wet sensor identifies any toilet accidents, sending instant notifications to the parent via the Blynk app. Additionally, a GPS module provides real-time location tracking, continuously updating coordinates on the app, enabling parents to always track the stroller's exact location. The system collects and processes all sensor data, transmitting it to the Blynk cloud for remote access and monitoring. By integrating wireless communication, sensor technology, and automation, the Advanced Baby Stroller offers a comprehensive, secure, and efficient childcare solution that minimizes risks and enhances parental peace of mind. This smart stroller not only improves child safety but also introduces a new level of convenience in modern parenting, ensuring that caregivers always remain informed and in control.*

Keywords: IoT-Based Automation, Smart Baby Stroller, Real- Time Monitoring

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