

Baby Boot: Devising a Multimodal Sensor for Enhanced Infant Monitoring

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- **The current lack of comprehensive medical monitoring of babies one hour postpartum is linked to the development of serious health conditions such as hypoxia and cerebral palsy.**
- **A novel, multimodal flexible sensor that can be worn as a boot will provide real-time data to allow physicians to act immediately if necessary.**
- **The sensor will detect and transmit data about the baby's pH, O₂, CO₂, and glucose levels.**
- **A machine learning classification algorithm will be used to analyze data and alert doctors of potential health risks.**
- **The goal of project is to create and test a prototype to offer a proof of concept for future industrial application.**

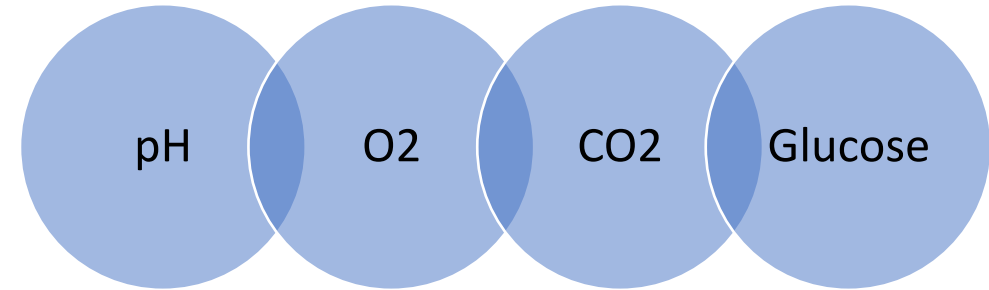


Fig 1: List of analytes that the sensor will observe

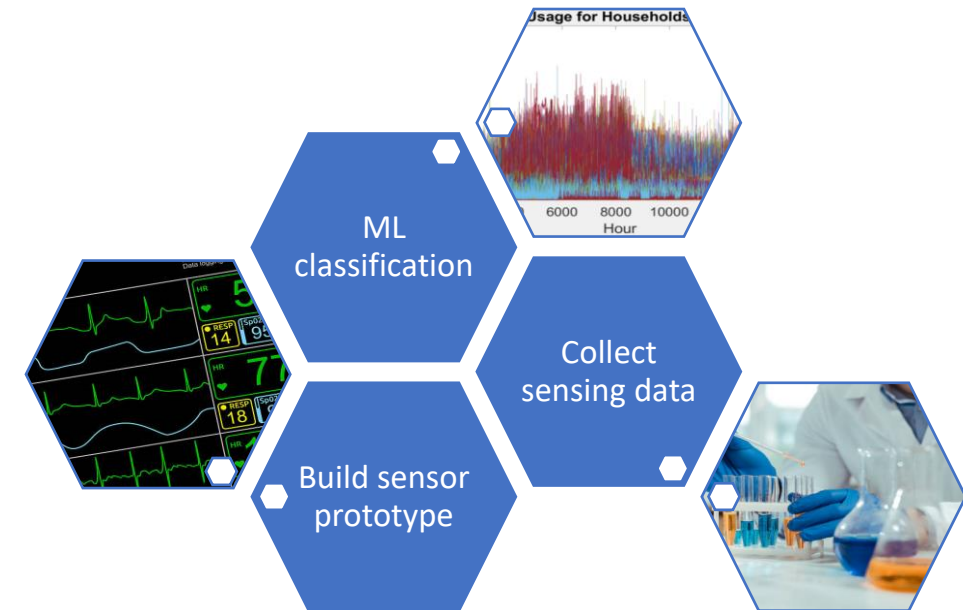


Fig 2: Lists the main goals of the REU project