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Baby Boot: Devising a Multimodal Sensor for Enhanced Infant Monitoring

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- **The lack of comprehensive monitoring of babies one hour postpartum has been linked to hypoxia and cerebral palsy.**
- **This 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.**

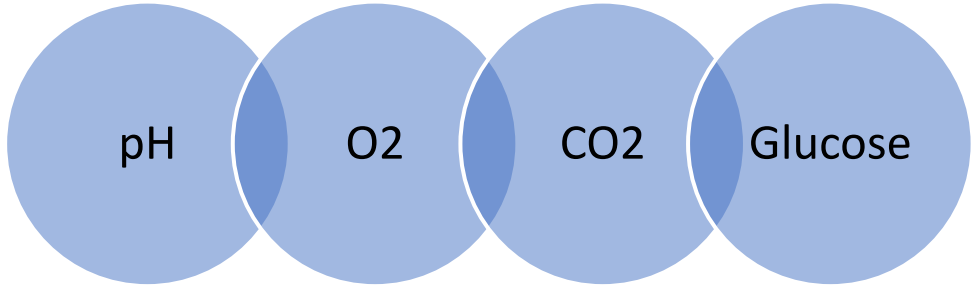

Fig 1: List of analytes that the sensor will observe

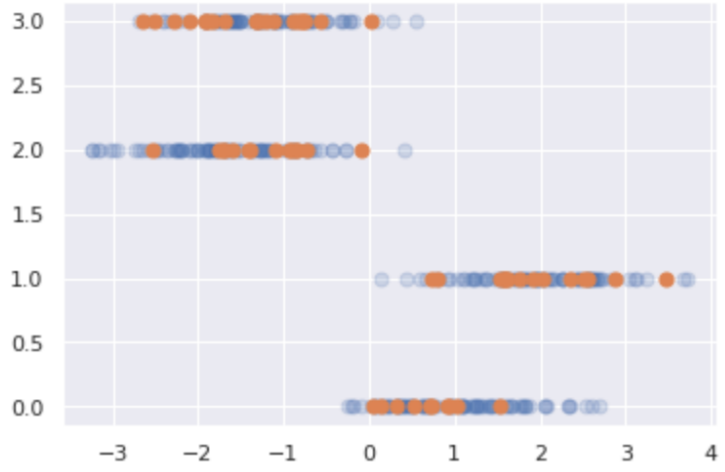

Fig 3: Displays pH datapoint groups (example set)

Metric	Value
Accuracy	0.98

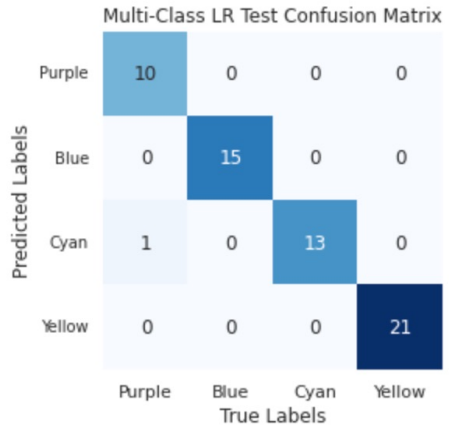

Fig 4: Confusion matrix used in logistic regression classification algorithm

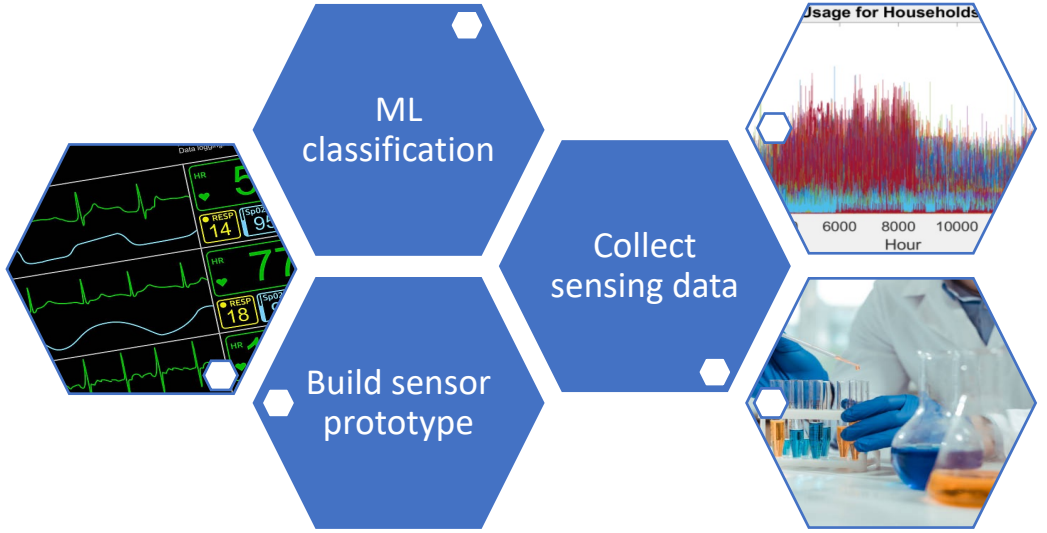

Fig 2: Lists the main goals of the REU project

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Sensor Signal and Information Processing Center
http://sensip.asu.edu

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