Wireless Wearable Infant Safety Monitoring Device

Status: Filled

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Sponsor(s):   Xccepted Technologies

Supervisor(s):   Farid Golnaraghi, PhD,

The main deliverables would be:
1) Working wireless & battery-less wearable sensor designed and operating
2) EEG sensor design able to scale to array
3) Simple GUI to display and manage EEG data output

Key Milestones are:
1) Month 1: Group Selection
2) Mo}ơ@2: R^çã¸ [~]¦[b^&c*[æ⚬, åã&˘••ą}•¸ ã@&[{]æ}ˆ,¦^çã¸ [~&[{]æ}ˆɕ existing technology, literary review of technology and proposed approach to meet project goals.
3) Month 3&4: First prototype design built and tested for energy outputs. Electrode feedback captured and logged in database for analysis.
4) Month 5&6: Second prototype developed on lessons learned from first prototype. Focus on increasing current power and maintaining stable output. Multi-electrode feedback captured and logged in data base for analysis. Simple alpha analyses of electrode data started.
5) Month 7&8: End of project: Final design prototyped with stable current able to power 1 . 3 electrodes and Bluetooth low energy. GUI completed along with simple software analysis of EEG Alpha wave for determining alertness states.