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| Authors, year | Dataset | Pre-processing | Features | Classification/Model/Algorithm | Results |
| Salim lahmiri et al.,10 December 2021.  [9] | The database is composed of expiration (EXP) set with 2638 cry signals (1319 healthy signals and 1319 unhealthy signals) and inspiration set (INS) with 1860 cry signals (930 healthy signals and 930 unhealthy | - | Comparison of model accuracy.  (Complete paper not available) | deep feedforward neural networks (DFFNN), long short-term memory (LSTM) neural networks, and convolutional neural networks (CNN). | -  (Complete paper not available) |
| WAHEB A., JABBAR et. Al.,  July 12, 2019  [10] | - | - | Check state of baby.  Real time monitoring.  good baby surrounding conditions (temperature, humidity).  Cradle swing turns on when the baby is crying and swings, also fan to regulate temperature and music to sooth the baby. | Algorithm 1 Monitoring and Control Algorithm for IoT-BBMS (In the paper Pg No 10)  Flowchart of the system (Pg No 11)  Adafruit MQTT server and  MQTT Dash mobile applications  NodeMCU microcontroller | IFTTT mobile application to notify the user that crying is detected on the baby monitoring system |
| Salim lahmiri er. Al.,  [13]  April 2021 | The database is composed of two sets: expiration (EXP) set  and inspiration (INS) set. The EXP set has 2638 cry signals and  INS set has 1860 cry signals. Specifically, there are 1319 healthy  signals and 1319 unhealthy signals in the EXP set. Moreover,  there are 930 healthy signals and 930 unhealthy signals in the  INS set | signal denoising, artifact removing, and segmentation to separate expiration and  inspiration episodes | cry audio signals of healthy infants from those with respiratory distress syndrome  Mel-frequency cepstral coefficients, tilt, and rhythm features | CAD system based on cepstrum analysis  DFFNN for infant cry signal classification (USED) | DFFNN outperforms miles better compared with SVM, PNN, NB  DFFNN, SVM, NB, PNN following 10-fold cross-validation protocol when applied to  EXP and INS sets  A)  the problem of classifying EXP cry signals, the DFFNN, SVM, NB, and PNN achieved an accuracy of 99.92%±0.00, 61.15%±0.04, 58.11%±0.01, and 56.71%±0.01, respectively. In addition, the obtained sensitivity is 99.85%±0.00, 61.03%±0.04, 56.31%±0.01, and 57.70%±0.03, respectively, for DFFNN, SVM, NB, and PNN. In terms of specificity, the DFFNN, SVM, NB, and PNN obtained 100%, 61.27%±0.05, and 59.93%±0.02, and 55.72%±0.02, respectively.  B)  the problem of classifying INS cry signals, the DFFNN achieved perfect accuracy, sensitivity, and specificity. The linear SVM, NB, and PNN, respectively, achieved an accuracy of 59.57%±0.01, 55.46%±0.02, and 52.63%±0.05, a sensitivity of 58.82%±0.04, 55.84%±0.01, and 47.10%±0.07, and a specificity of 60.32%±0.04, 55.08%±0.02, and 58.17%±0.06.  [Graph in Paper] |

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