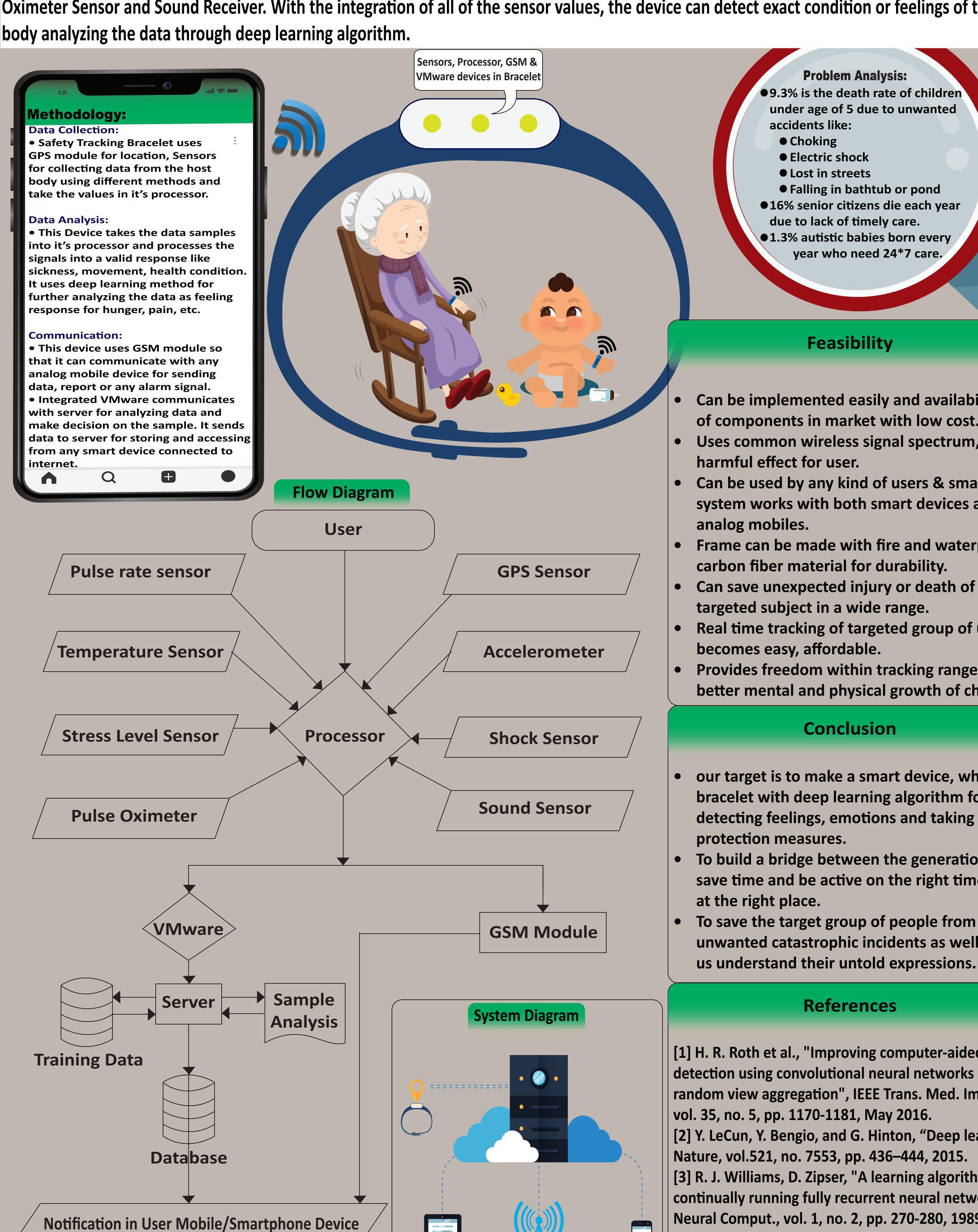
## Proposal on "Safety Tracking Bracelet" for Children, Aged & Handicapped(Specially Intellectual) using Deep Learning Algorithm



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Abstract: "Safety Tracking Device" is the life saver smart device for babies, aged parents or handicapped persons (specially intellectual). In most of the cases, we fail to take care or track our children or aged parents 24/7 leaving them in unfortunate dangers like losing in street, falling in bathtub or near neighbor's pond. It contains GPS module, Stress Sensor, Pulse Rate Sensor, Temperature Sensor, Accelerometer, Shock Sensor, Oximeter Sensor and Sound Receiver. With the integration of all of the sensor values, the device can detect exact condition or feelings of the host



- under age of 5 due to unwanted
  - Falling in bathtub or pond
- year who need 24\*7 care.
- Can be implemented easily and availability of components in market with low cost.
- Uses common wireless signal spectrum, no
- Can be used by any kind of users & smart system works with both smart devices as well
- Frame can be made with fire and waterproof carbon fiber material for durability.
- Can save unexpected injury or death of targeted subject in a wide range.
- Real time tracking of targeted group of users
- **Provides freedom within tracking range for** better mental and physical growth of children.
- our target is to make a smart device, which is a bracelet with deep learning algorithm for detecting feelings, emotions and taking
- To build a bridge between the generations to save time and be active on the right time and
- To save the target group of people from very unwanted catastrophic incidents as well letting

[1] H. R. Roth et al., "Improving computer-aided detection using convolutional neural networks and random view aggregation", IEEE Trans. Med. Imag., vol. 35, no. 5, pp. 1170-1181, May 2016. [2] Y. LeCun, Y. Bengio, and G. Hinton, "Deep learning,"

Nature, vol.521, no. 7553, pp. 436-444, 2015.

[3] R. J. Williams, D. Zipser, "A learning algorithm for continually running fully recurrent neural networks", Neural Comput., vol. 1, no. 2, pp. 270-280, 1989.

[4] C. M. Bishop, "Pattern recognition", Mach. Learn., vol. 128, pp. 1-737, 2006.