# Emotion Detection and Correction Device

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- **Possible applications of emotion detection devices include assistive technology to monitor and correct emotions of individuals with locked-in syndrome.**
- **Device utilizes a heart rate sensor, and a skin conductance sensor connected to a processing board.**
- **Heart rate sensor records the heart rate and respiration rate, whereas, skin conductance sensor records the electrodermal activity, the electrical conductivity of the skin using the variation in sweat produced by the sweat glands.**
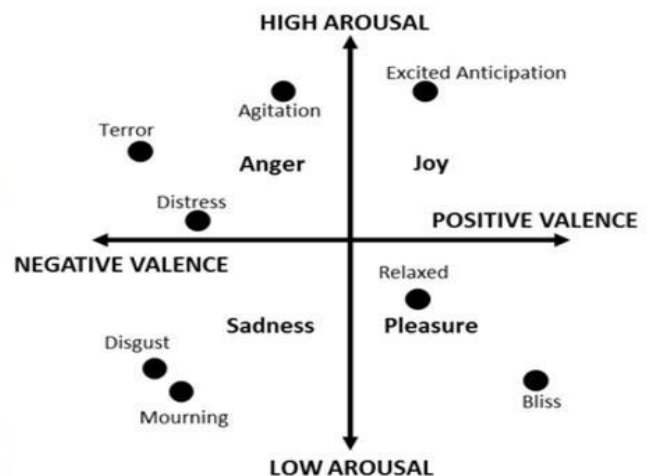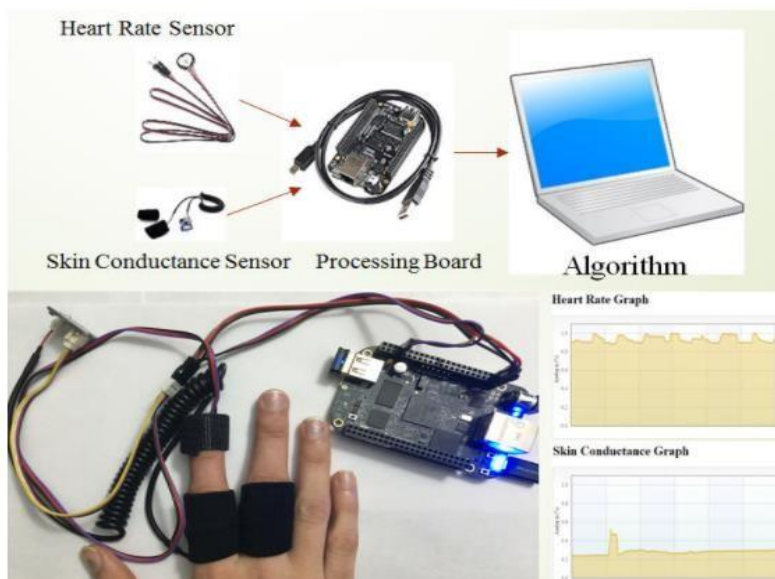
- **Data from the heart rate and skin conductance sensors are processed using a custom algorithm on the processing board; variations in heart rate values (HRV) and skin conductance rates (SKR) are utilized to ascertain the emotion.**
- **Emotions generate variations in biological signals, and each emotion has its own characteristic manifestation. For example, when a person is angry, his/her heart rate rises and skin conductance decreases.**
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