

TeleEGGs

Sheng Kai Tang, COmputational DEsign Lab, CMU

Introduction

In daily life, there are many subtle actions delivering human emotions in very unique ways. For example, one is capable of perceiving the other's demands and feelings just by a glance. Via a smile and a blink, one can easily convey his/her concerns to the other. In other words, without any apparent verbal or physical communication, frequent feeling exchange of human being could still happen. This is what we called "Indirect Emotional Communication (IEC)."

However, when two people are not at the same space and can't see each other, IEC is hard to proceed. Under this situation, emoticons are widely adopted as substitutions. We can always see a three-stroke smiley face on a note which mother left to her child. Or it is common to see some simple text symbols consist of " :-)" representing another kind of smiley face. With popular textual and graphical emoticons, IEC could possibly exist in online chat rooms and messengers nowadays expressing people's feelings.

Actually, digital emoticons require an online platform to operate. This force us to develop the TeleEGGs, a pair of hand held devices, to enhance the IEC especially for people who are either not under the online situation or can't access any online resources. Through sensors, actuators and wireless module embedded, people are still capable of delivering and receiving abstract feelings remotely and real time.

Scenario

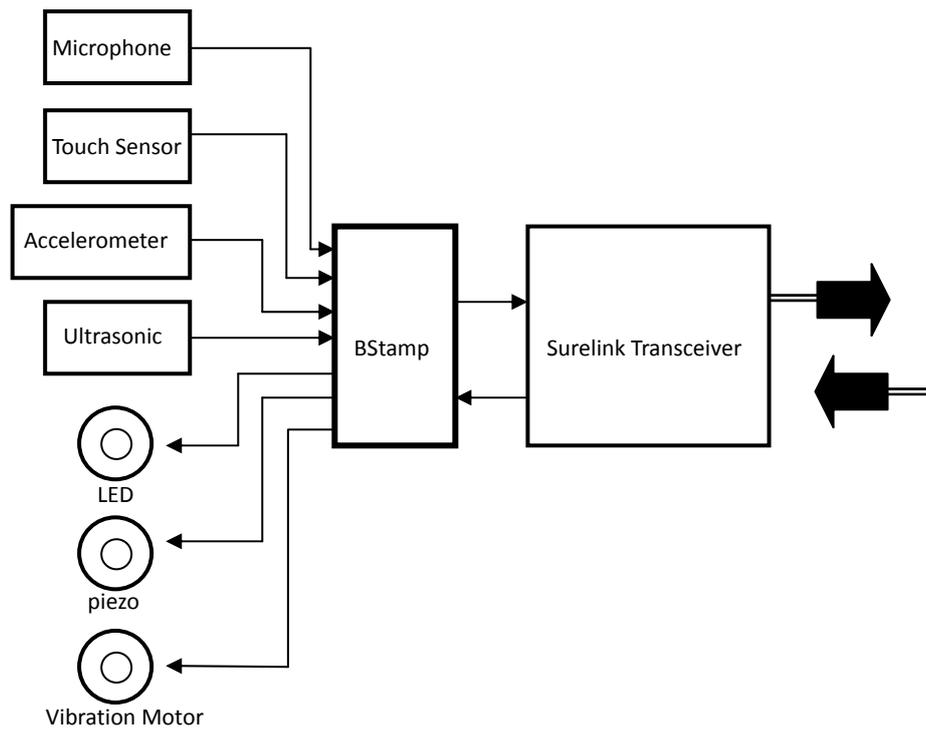
Tom is a workaholic. He always concentrates on his work and forgets to take short breaks. He also doesn't like to be interrupted by any phone call or online popup dialogue while working. Hence, his wife is now looking for a calm technology for observing Tom's working situation and reminding Tom something about rest at the right time. TeleEGGs is now designed to fit this need.

TeleEGGs provides one observation mode and three modes for emotion delivering and perceiving:

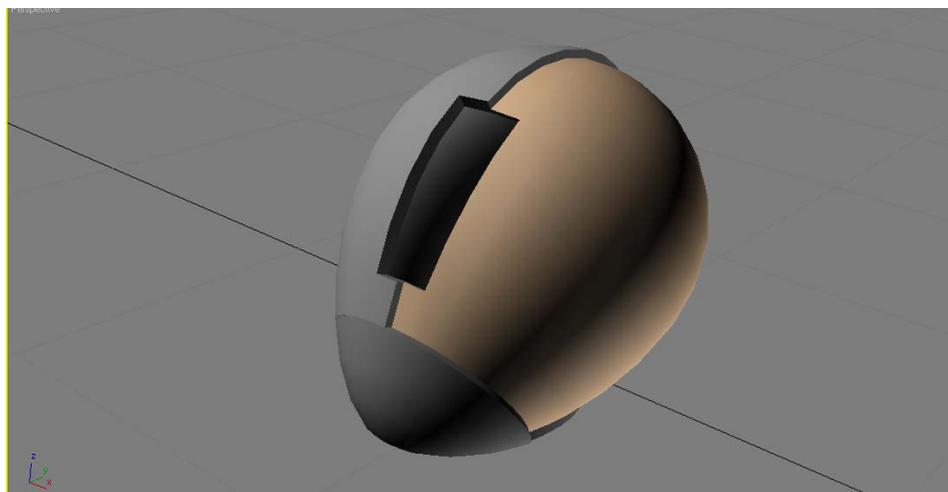
- 0. Observation:** The ultrasonic sensor can detect a person's presence and count the time duration of the presence. Different time durations collected by one egg will trigger different color blinking of the other.

1. **Slight Reminding:** By softly touching one egg, the other blinks in blue.
2. **Middle Reminding:** By shaking one egg, the other vibrates.
3. **Strong Reminding:** By shouting at one egg, the other generates noises.

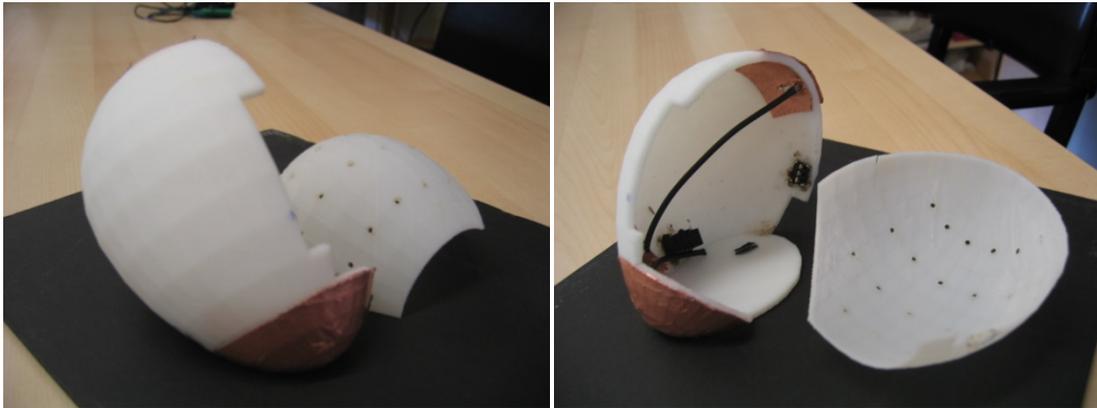
System Diagram



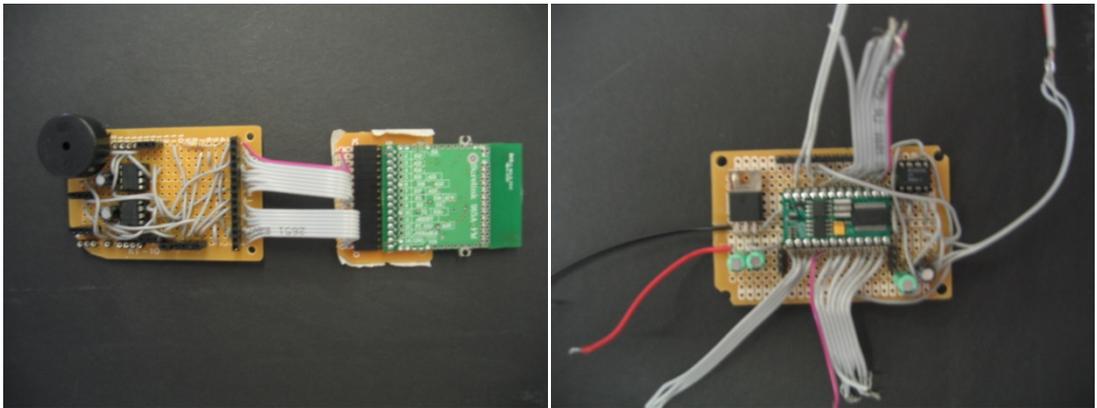
Digital Form



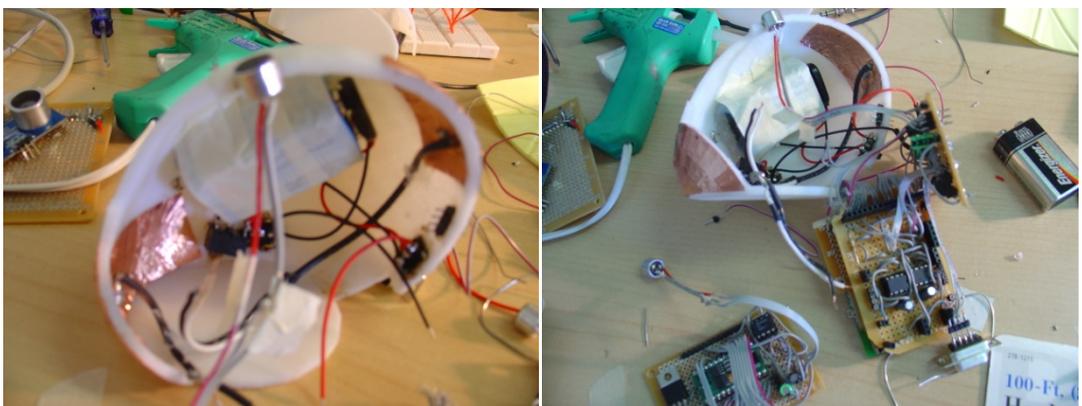
Physical Form



Electronic Boards



Integration



Final

