



ETHER

Space science

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OUR IDEA

Nowadays according to many factors such as corona virus pandemic, economic situations, environmental stress etc. are affecting human's mental health. But the most important point is that the reason of mental problems is still unknown, therefore by recognizing some of them, we can come up with better solutions to make a better society.



OUR IDEA

If we find the most repetitive feeling among people these days and classify them by their location, we can look for possible reasons that may have led to mental issues.



FEELINGS' FREQUENCY

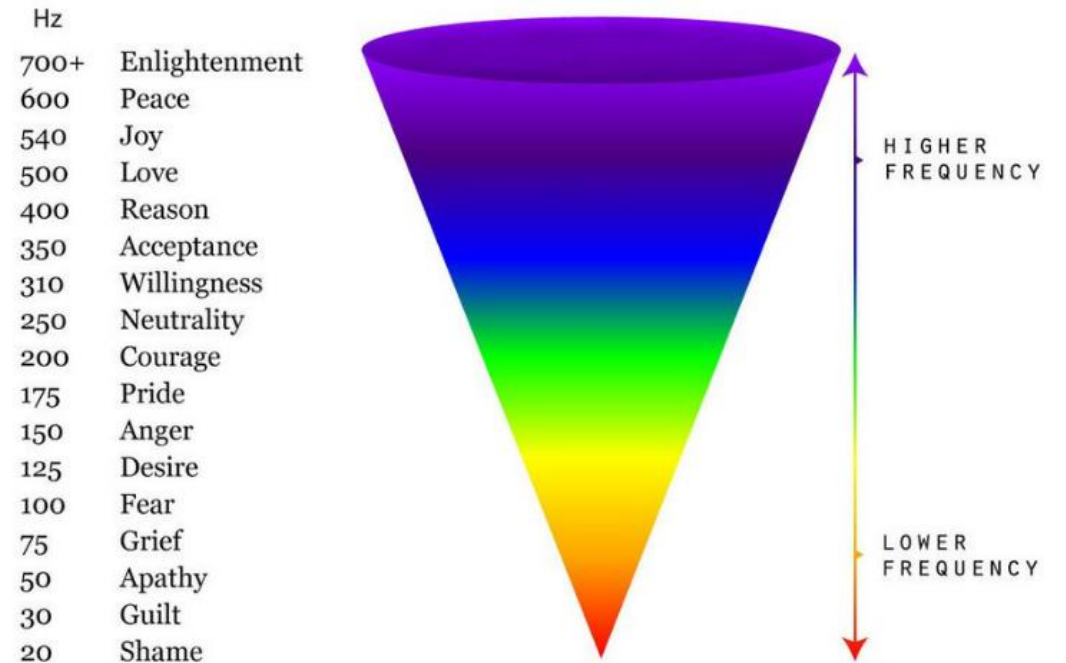
To get into this project first we need to know what emotional frequency is. when we are feeling something like anger, peace, happiness etc. our body radiates some frequency and by categorizing them, it is possible to know how a person is feeling.



FEELINGS' FREQUENCY

As you can see in this chart, our frequency varies due to our emotions, happier we are, the higher the frequency gets and vice versa. So a possible way to identify people's emotions is to categorize them based on frequencies. In other words, if we can measure the frequencies people are having at the moment, we can say what kind of feeling they're experiencing.

Emotion Frequencies



SENSORS

Our project contains two main type of sensors:

- + A sensor for detecting human
- + A sensor for measuring frequencies



FREQUENCY SENSOR

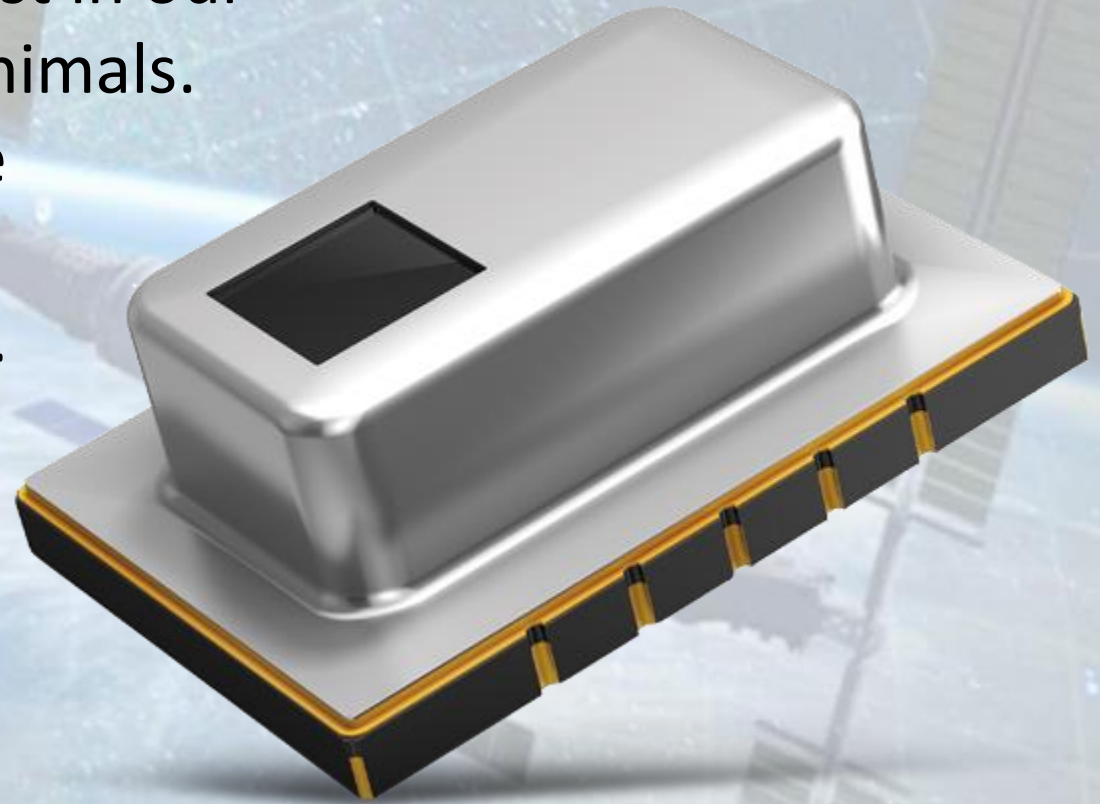
The frequency sensor, works simply and just receives the given frequencies. But there is one little problem which is the range of our sensor. Frequency sensors can't receive any data that are far away.



GRID-EYE SENSOR

There are several sensors that can tell if our subject is alive or not, based on its individual factors such as temperature. But what matters the most in our project is distinguishing human from animals.

It is a bigger challenge because they're both alive and there aren't much measurable differences between them.



GRID-EYE SENSOR

For example, animals' body temperature is somehow the same as ours, or not only it's difficult to measure heart beat from a great distance, but also there are several species of animals that the range of their heart beat, is close to human's. so the best way for telling if our observation is human or not, is writing an algorithm.

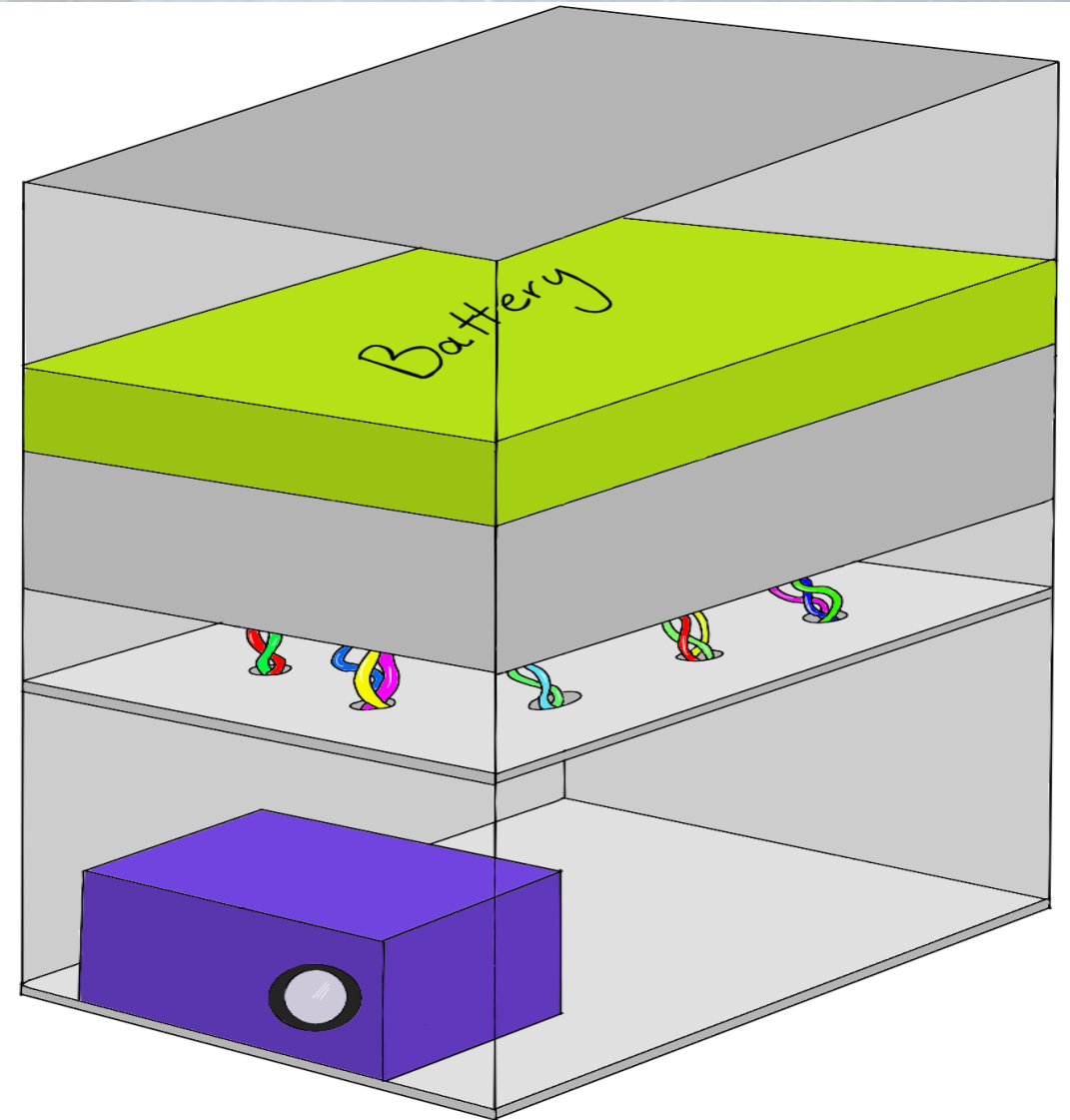


ALGORITHM



A SAMPLE OF OUR CUBE-SAT

There's still a little point left about our project to be mentioned. According to our circumstances (living in Iran and the high price of equipments), we couldn't afford to make an actual version of the cube-sat, so instead we decided to draw our idea.



RESULTS

So when we've detected human, we can allow our cube-sat to collect they're frequencies. By conforming our received data from the cube-sat with the given information in the emotional frequency chart, we can tell whether people in a special area are feeling happy, sad, angry, bored etc.



RESULTS

Just as we said in the beginning, there are many reasons behind mental issues. So when we can classify our information in each location, we can figure out what people in those areas have in common that has led to such a result. For example if we find out that the most repeated feeling in a country is anger, we can start looking for its reasons. Or if we find why people in another country are happier than others, we can make solutions so that more people can be peaceful.

THANKS FOR YOUR ATTENTION

The background of the slide features a detailed illustration of a space station in orbit above the Earth. The station consists of a central hub with several modules and large solar panel arrays extending outwards. The Earth's surface is visible below, showing blue oceans and white clouds. A semi-transparent grid of yellow lines is overlaid on the entire scene, creating a technical or digital aesthetic. The text 'THANKS FOR YOUR ATTENTION' is centered horizontally across the middle of the image in a bold, red, serif font.