

Capturing the feeling of a Person using Neural-lace and Recreating it Artificially

1. Preetham CS 2. Vishak A Kamath

Pursuing Computer Science & Engineering at Adichunchanagiri Institute of Technology
Vishweshwaraiah Technological University
Chikmagalur, Karnataka

preethampree2@gmail.com , vishak.kamath@outlook.com

Abstract

We are grateful for the advancements in the latest technologies and advancements in neuroscience. Talking of advancements, this paper explains about an idea of “Capturing the feel of a person and regenerating it artificially in other person to simulate the similar experience the first person had”. This can be done using Neural-Lace. Human brain reacts to any situation by releasing different hormones based on the circumstances. These hormones decide the functionality of different organs in human body. Using the hormones released as the key element, detection of the state of a person is possible. Recording this behavior digitally, making it portable and finally rebuilding the digital data back into normal state can be used to release the same hormones to create the exact feeling which was recorded. This invention can create enormous changes in medical field also. Just not that, people can exchange feelings of their different experiences. It provides a new methodology for understanding people and their behaviors.

Index Terms---Hormones, Neural-laces, Enormous Applications, Scope, Revolutionary.

1) Introduction

This paper is about the proposal of an idea on artificially recording human feelings in such a way that it can be carried over in digital form from one person to other. This can be possible with the help of an advanced technology called NEURAL-LACE. We are proposing this idea because it highlights the facts of extreme advancements and betterments in medical field, virtual environment generation, enhancing user experience in many more fields. The human brain releases specific hormones for every situation i.e. for both mental and bodily changes. These hormones collectively contribute to human state at that particular moment both mentally and bodily. Identifying the hormones released and representation of that will be done digitally. Using this digital data again the same hormones are released in other person to create the similar feeling the first person had. The doctors instead of listening to what is happening to the patient can just feel the same and treat their patients with precision. We can achieve better human understanding and know about different perspectives of people.

2) Methodology

This concept arouses many different questions like “how to extract the hormonal information from the brain?”, “how to detect the hormones released for different feelings?”, “how to transmit the data from one person to other?” ,”mode of transmission and recreation” is a very big question.

The invention of NEURAL-LACE has led to enormous possibilities for new invention.



NEURAL-LACE is a mesh that can be injected into your brain and grows with your brain after it is installed. This mesh has the ability to detect the hormones released by the brain during different tasks performed by the humans. It can also program your neurons to release certain chemicals and these chemicals are nothing but hormones responsible for feelings.

The device will be built in such a way that it should be a wearable at first place. Now the device with the help of NEURAL-LACE retrieves the information of hormones released as per the person's feelings at that particular moment. This information is encoded digitally in a machine understandable language. This recorded data is then carried over just like a media file, which is transferred to other device that

is worn by the second person. Here the information is decoded and sent to the Neural-lace to trigger the same hormones in the second person's brain, these hormones released will do rest of the job by regenerating the same feeling the first person had.

3) Advantages

Literally we can achieve the extremes with this.

- Medical application of this concept will be revolutionary because of the fact that 'patients can now simply transfer their bodily feelings and mental state to the doctor' through which a better treatment can be obtained.*
- One more amazing part is many people have never even dreamt of climbing the Mt Everest or surfing the Pacific Ocean and many more things. What if you could still not do those things but feel the same experience whenever and wherever you want. Yes, it is possible.*
- Psychological benefits are also enormous wherein we can understand the people more precisely than ever before.*
- User experience analysis is taken to a whole new level by knowing exactly how the user feels on using a product.*
- We can extract different perspectives from people to people for a similar feeling which might contribute to enormous innovations.*

4) Limitations

Even though we have a wide range of benefits, there also exist few cons of it.

- *Transferring the feel of patient is nothing but almost transferring the disease itself.*
- *Every feel captured will be from the perspective of the person from whom it was recorded.*
- *In case, you experience your own feeling of some situation, we have an ambiguity for what it may lead to.*

5) Applications

- **Medical:** *Ever felt it difficult to convey to the Doctor about what exactly is the problem you are going through? Capture how you feel and let the doctor experience it to treat more effectively.*
- **Education:** *In this aspect things are going to work out very differently because teachers can analyze their caliber and can implement innovative methods for better teaching.*
- **Realistic expression:** *No matter how good you explain situations, it is never equal to the feeling what you really had. Through this device we can give the at most realistic description.*

- **Preserving Obsoletes:** *Few things which can't be artificially generated like "how it feels to watch a retro movie" or "how it feels to attend a concert of MJ" are few examples. Once you record these feelings, you can preserve it forever.*
- **User Experience Improvement Program:** *IT companies, Automobile industries and many different service providers can know the exact user feeling while using their product and can improve their standards.*

6) Conclusion

Feel Capture, as the word describes capturing the feelings, will lead to a huge revolution in many fields especially in Medical and Educational.

*It is possible with a mesh like device called **Neural-Lace**. This device can be installed into our brains and the brain cells will grow around the mesh creating a good interface, which has been successfully tested on the mice. Injecting it into the brain to create an interfacing between the computer and neurons involves nanotechnology.*

7) Future Enhancement

- *As of now this mesh is connected through wires. In future wireless*

mode for transmission may be designed.

- *With the current technological resource the device developed might be bulky and not very user friendly. But in future it may be made compact like mobile phones and with a smarter UI*
- *.*
- *Instead of installing Neural-lace directly into the human brain, we may find an alternate method which is more flexible and reliable.*
- *We can enhance the quality of feel capture by targeting furthermore sensitive aspects of human body like body temperature, adaptability and so on.*

8) Acknowledgement

1. Apoorva Sajjan Shetty

Student at Vydehi Institute of Medical Science
Pursuing MBBS.

2. Rahul Patil

Student at Adichunchanagiri Institute of Tech
Pursuing Electronics & Communication
Engineering.

9) References

STRUCTURE AND WORKING OF HUMAN BRAIN

- <https://en.wikipedia.org/wiki/Brain>
- <https://en.wikipedia.org/wiki/Hormone>

NEURAL-LACE CONCEPT

- <http://gizmodo.com/scientists-just-invented-the-neural-lace-1711540938>
- <http://www.businessinsider.in/Elon-Musk-thinks-we-need-to-add-a-layer-of-digital-intelligence-to-our-brains/articleshow/52549552.cms>

- PICTURES

<https://d.ibtimes.co.uk/en/full/1444315/electronic-mesh-that-integrates-brains.jpg?w=400>