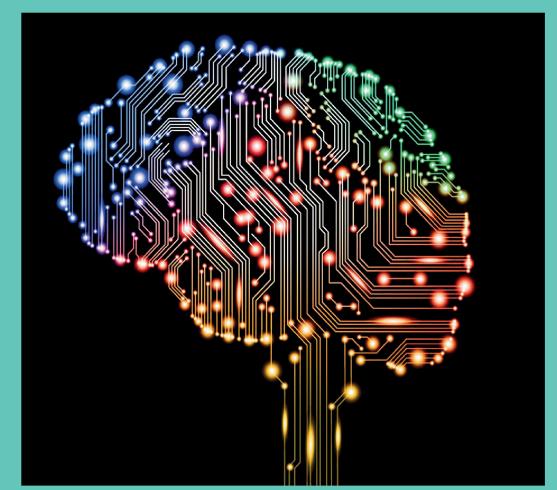


# NEUROCINEMATICS: The Intelligent Review System



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## Motivation

- Each producer invests crores of rupees in each film , which may lead to huge losses and defamation
- We chose Cognitive Computing as the solution since it can offer a unbiased review review for a film with high flexibility

## Literature Review

- Our solution is based on the paper titled "The Neuroscience of Film" by Uri Hasson, Ohad Landesman, B. Knappmeyer, Ignacio Vallines, Nava Rubin , and David. J. Heeger
- We also took into consideration, the fmri review of trailer of the movie -"Avatar" by J. Cameroon done by Mind Sign

## Materials and Methods

- We use EEG headbands to record the live responses given by each viewer



Fig 1.1-  
14 electrode ,  
Emotiv EPOC  
used for user  
analysis.



Planning



Test



Report



Analysis

## Protocol / Expected Results

- For the first phase , we consider 5 people each for 3 different age groups ( 20 - 30, 31 - 40, 41- 50 ) and subject them to a shortfilm spanning 20 mins in three different genre ( Romance, Horror and action)
- We then map the obtained results to a pre-determined scale which is fixed as the reference
- Average score of the obtained readings from different persons is calculated and produced as the final result of phase 1

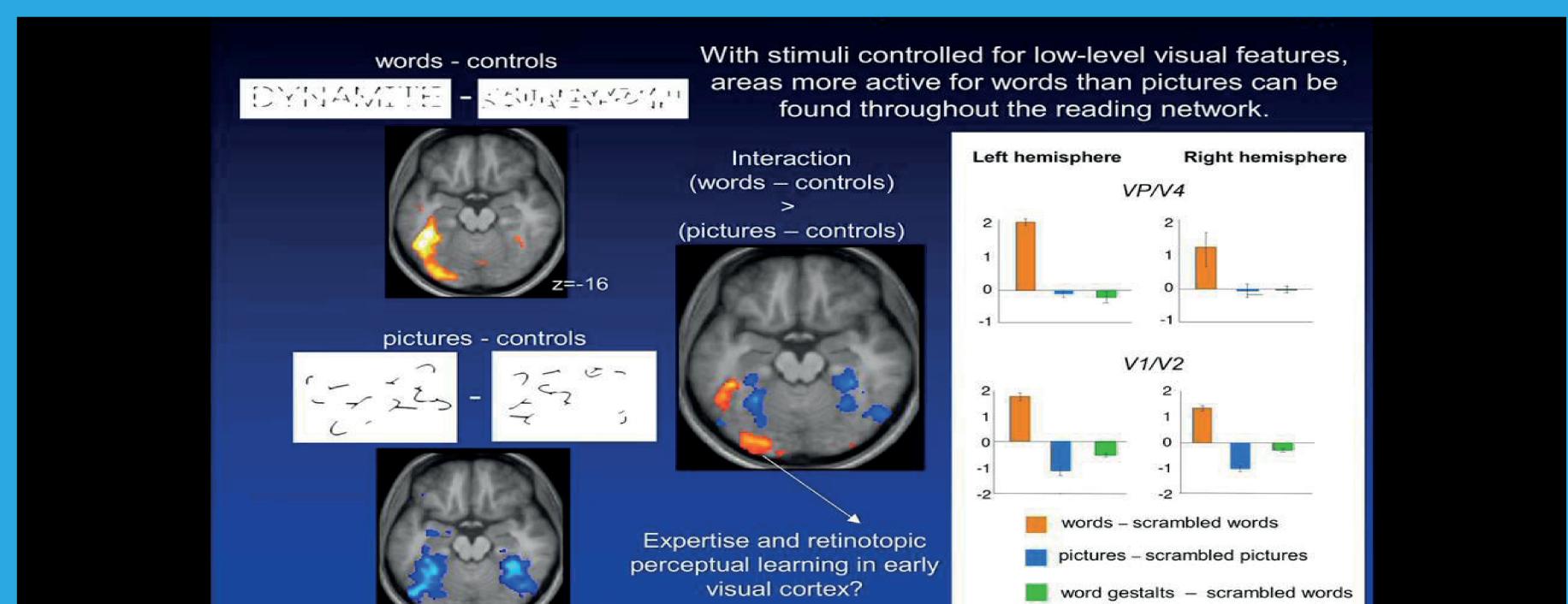


Fig 1.2 - Expected frequency map for a particular period of time

## Challenges Ahead

- signal to Noise Ratio can be found out only when the actual work is carried on
- Mental state of the person under study
- This research inevitably raises ethical challenges and a public debate on rights and restrictions is to be expected.

## Conclusion and Outlook

- What we do here cannot exactly predict , if the movie is going to be a success or failure
- This method acts as a extra layer of fail-proof coating
- We propose EEG analysis can contribute to the cognitive movement in film theory, analogous to contributions that neuroscience has made to cognitive and social psychology
- The complete review of each film is beyond the domain of this project, and it is left to the critics and the viewers.

## Sources

- Neurocinematics: The Neuroscience of Film Uri Hasson, Ohad Landesman, Barbara Knappmeyer, Ignacio Vallines, Nava Rubin, and David J.Heeger
- American Journal of EEG Technology ,Volume 9, Issue 1
- Nonlinear Responses in fMRI: The Balloon Model, Volterra Kernels, and Other Hemodynamics,K.J. Friston, A. Mechelli, R.Turner, C.J. Price
- Neurocinematic Approaches to Sonics, Ethics, and Affect Jane Megan Stadler

## Acknowledgement

We take this privilege to express a few words of gratitude and respect to all those who are helping us in completion of this project . First of all we would like to express our sincere gratitude to our mentor Dr. N. Bhalaji without whom pursuing this project wouldnt have been possible, we would also like to thank our HOD Dr. Nagarajan for his guidance and support , we also express our gratitude to Dr. R. Srinivasan for his constant support , we also thank all the faculties in our department for their valuable suggestions

## About the Authors

G. krishna and G. Gautham Krishna pursue their B.Tech in SSN College Of Engineering , guided by Dr. N. Bhalaji , they currently pursue their research in Neurocinematics . "To venture into the realm of computer and cognition is to pursue a path of boundless discovery and invention ; we are in awe of how much life has been made easier by advances in cognitive computing , paving the way for new and better use of technology..." is the reason they say , when questioned as to why they pursue their research in this field.