

Emotionally Intelligent Machines(EIM's) & Sentiment Sythesis based on Ancient Vedic Astrology (March 04, 2023) Seminar (MCS 291) M.TECH CSE



Guided By:
Dr. Priyank Singhal
Mr. Vikas Kuchhal

Presented By:
Mohit Singh

**TEERTHANKER MAHAVEER UNIVERSITY,
COLLEGE OF COMPUTING SCIENCES & INFORMATION TECHNOLOGY
MORADABAD-244001(INDIA)
Session: 2022-23**



CONTENTS

- ☐ **ABSTRACT**
- ☐ **INTRODUCTION**
- ☐ **LITERATURE REVIEW**
- ☐ **REFERENCES**

ABSTRACT

In this paper, we will discuss about the Emotionally Intelligent Machines(EIM's) which is the new field of research in Artificial Intelligence but it has a great potential to do immense good, however the technology can be misused but it is up to the consumers of this technology who will decide whether it will be used for good or for evil. Also, Astrology has always been a controversial topic and is completely depends upto the personal faiths and beliefs of an individual. Apart from that, this paper describes that how Emotionally Intelligent Machines(EIM's) & Sentiment Synthesis Systems can be developed by using the concept of Ancient Vedic Astrology.



INTRODUCTION

Why Truly Intelligent Machines Need Emotions?

After brain researchers have recognized that emotions are crucial for human and animal intelligence, Artificial Intelligence researchers have also started to acknowledge the importance of emotions in the design of intelligent machines.

For half a century, artificial-intelligence researchers have focused on giving machines linguistic and mathematical-logical reasoning abilities, modelled after the classic linguistic and mathematical-logical intelligences. This paper describes new research that is giving machines skills of emotional intelligence.

INTRODUCTION

Why Truly Intelligent Machines Need Emotions?

Machines have long been able to appear as if they have emotional feelings, but they are now being programmed to also learn when and how to display emotion in ways that enable them to appear empathetic or otherwise emotionally intelligent. They are now being given the ability to sense and recognize expressions of human emotion such as interest, distress, and pleasure, with the recognition that such communication is vital for helping them choose more helpful and less-aggravating behaviour.

INTRODUCTION

Why Truly Intelligent Machines Need Emotions?

Emotionally Intelligent Machines(EIM's) is the development of systems that can recognize, interpret, process, and simulate human emotions based on the concept of ancient vedic astrology. They are the machines which can adapt different situations and knows how to handle these situations more intelligently and smartly. In modern technical world, the need of EIM's are can be seen due to their numerous applications which are expanding rapidly.

INTRODUCTION

Some of the common applications of EIM's are:

- **Social Media:** EIM's can be used in social media to analyse user's emotions and provide more personalized content.
- **Business Intelligence:** EIM's are more intelligent than the traditional machines as a result they can be used in Business Intelligence and can help in Decision Making.
- **Human Resources:** EIM's can be used in human resources to analyse employee's emotions and improve the work environment and productivity.

INTRODUCTION

- **Development of Machine Ethics & Computational Morality:** EIM's can be useful in developing machine ethics and morality by allowing machines to understand and respond to human emotions, which is an important component of ethical and moral decision-making.
- **Human-Computer Interaction(HCI):** EIM's is extremely helpful in HCI, as it enables computers to understand and respond to human emotions, making the interaction more natural, intuitive, and empathetic.

INTRODUCTION

- **Customer Service:** EIM's can be used in customer service to understand customer's emotions and respond accordingly, improving customer satisfaction. They can also be used in getting customer reviews, feedbacks & and conducting surveys.
- **Healthcare:** EIM's can be used in healthcare to detect patient's emotions and provide appropriate treatment and care. Treatment of psychic patients. Counselling for persons suffering from depression & anxiety or even having suicidal tendency.

INTRODUCTION

- **Education:** EIM's can be used in education sector to improve the effectiveness of teaching by understanding the emotional state of the students and adapting the teaching method accordingly.
- **Marketing & Sales:** EIM's can be used in marketing to analyse customer's emotions and tailor marketing messages to maximize their impact.

INTRODUCTION

- **Art & Culture:** Artistic content generation such as Melodies & Progressions in Music, Paintings & Poetry with correspondence to the culture.
- **Entertainment:** EIM's can be used in the entertainment industry to create more immersive experiences for users by understanding their emotional responses, in gaming & movies industries to create more engaging games that respond to the player's emotions also to create the dynamic environments accordingly and writing scripts.

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
1	Concise History of Hindu Astrology			2023
2	Description of Twelve Zodiac Signs in Ancient Indian Texts			2022
3	Astrology, Modernity & Self Identity			2022

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
4	Predictability and Predictions			2022
5	3 Butterfly Effects in Lorenz Models			2022
6	Consciousness And Its Relation With Subconscious Mind			2021

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
7	RL for Emotional Text To Speech Synthesis			2021
8	Emotional Speech Synthesis			2020
9	Sentiment Analysis Based on DL			2020

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
10	GAN's in Human Emotion Synthesis			2020
11	Emotional Intelligence in Artificial Intelligence			2019
12	Word-level sentiment analysis with RL			2019

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
13	Consciousness and Unconsciousness of AI			2019
14	Sentiment Analysis by Plutchik's Model			2019
15	Emotional Intelligence for Artificial Intelligence			2017

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
16	Sentiment Intensity Ranking among Adjectives			2017
17	Recognizing Image Emotions			2017
18	Emotional Chatting Machine			2017

LITERATURE REVIEW

S.NO	PAPER TITLE	TECHNIQUES	FINDINGS	YEAR
19	sparse identification of nonlinear dynamical systems			2016
20	Detecting Sentiment in Daily Horoscope			2012
21	Children's Emotional Development			2004

REFERENCES

- ❑ Paulo Martins “A Concise History of Hindu Astrology and Indian Spirituality” Scholars Journal of Arts, Humanities and Social Sciences.
- ❑ Raja M L Maravan Lakshmana Reddi “Description of Twelve Zodiac Signs in Ancient Indian Texts” ResearchGate.
- ❑ Paul Clements | Goldsmiths College, University of London, London, UK “Astrology, modernity and the project of self-identity” Goldsmiths College, University of London, London, UK.
- ❑ Richard A. Anthes “Predictability and Predictions” MDPI Journal.
- ❑ Bo-Wen Shen, Roger A. Pielke, Xubin Zeng , Jialin Cui, Sara Faghih-Naini , Wei Paxson & Robert Atlas “Three Kinds of Butterfly Effects within Lorenz Models” MDPI Journal.
- ❑ Krishanu Kumar Das “Consciousness: And Its Relation With Subconscious Mind” Department of Medicine, HLG Memorial Hospital, Asansol, India.
- ❑ Rui Liu, Berrak Sisman & Haizhou Li “Reinforcement Learning for Emotional Text-to-Speech Synthesis with Improved Emotion Discriminability” INTERSPEECH.

REFERENCES

- Rui Liu, Berrak Sisman & Haizhou Li “Reinforcement Learning for Emotional Text-to-Speech Synthesis with Improved Emotion Discriminability” INTERSPEECH.
- Hiroaki Takatsu, Ryota Ando, Yoichi Matsuyama & Tetsunori Kobayashi “Sentiment Analysis for Emotional Speech Synthesis in a News Dialogue System” Proceedings of the 28th International Conference on Computational Linguistics.
- Noushin Hajarolasvadi, Miguel Arjona Ramírez & Hasan Demirel “Generative Adversarial Networks in Human Emotion Synthesis:A Review” Noshin Hajarolasvadi et al.
- Sahiti S. Magapu & Sashank Vaddiparty “The Study of Emotional Intelligence in Artificial Intelligence” International Journal of Innovative Science and Research Technology.
- Ruiqi Chen, Yanquan Zhou, Liujie Zhang & Xiuyu Duan “Word-level sentiment analysis with reinforcement learning” IOP Conference Series: Materials Science and Engineering.

REFERENCES

- ❑ Ruiqi Chen, Yanquan Zhou, Liujie Zhang & Xiuyu Duan “Word-level sentiment analysis with reinforcement learning” IOP Conference Series: Materials Science and Engineering.
- ❑ Eugene Piletsky “Consciousness and Unconsciousness of Artificial Intelligence” Future Human Image, Volume 11, 2019.
- ❑ Mohsin Manshad Abbasi & Anatoly Beltiukov “Summarizing Emotions from Text Using Plutchik’s Wheel of Emotions” Advances in Intelligent Systems Research, volume 166.
- ❑ Arvind Kumar, Rajiv Singh & Ram Chandra “Emotional Intelligence for Artificial Intelligence: A Review” International Journal of Science and Research (IJSR).
- ❑ Raksha Sharma, Arpan Somani, Lakshya Kumar & Pushpak Bhattacharyya “Sentiment Intensity Ranking among Adjectives Using Sentiment Bearing Word Embeddings” IIT Bombay, India.

REFERENCES

- Hye-Rin Kim, Yeong-Seok Kim, Seon Joo Kim & In-Kwon Lee “Building Emotional Machines: Recognizing Image Emotions through Deep Neural Networks” PapersWithCode.
- Hao Zhou, Minlie Huang, Tianyang Zhang, Xiaoyan Zhu & Bing Liu “Emotional Chatting Machine: Emotional Conversation Generation with Internal and External Memory” PapersWithCode.
- Steven L. Brunton, Joshua L. Proctor & J. Nathan Kutz “Discovering governing equations from data by sparse identification of nonlinear dynamical systems” Department of Mechanical Engineering, University of Washington, Seattle, WA 98195.
- Zeljko AGIC & Danijela MERKLER “Rule-Based Sentiment Analysis in Narrow Domain: Detecting Sentiment in Daily Horoscopes Using Sentiscope” Proceedings of the 2nd Workshop on Sentiment Analysis where AI meets Psychology (SAAIP 2012).
- “Children’s Emotional Development Is Built into the Architecture of Their Brains” NATIONAL SCIENTIFIC COUNCIL ON THE DEVELOPING CHILD.