



August 24, 2023

**Department of Corporate Services,
BSE Limited,
P J Towers,
Dalal Street,
Mumbai – 400001**

SCRIP CODE – 504341

Sub: Copy of Notice published in Newspapers – 43rd Annual General Meeting to be held on September 16, 2023

Dear Sir/Madam,

Pursuant to the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 please find enclosed herewith copies of newspaper advertisements containing, “**Notice to the Members of the Company regarding 43rd Annual General Meeting of the Company to be held through VC / OAVM**”, published by the Company in accordance with the General Circulars issued by the Ministry of Corporate Affairs, in the following newspapers –

1. “Kannada Prabha” Newspaper in Kannada language; and
2. “The New Indian Express” Newspaper in English language.

The said newspaper advertisements are also available on the Company’s website at www.ravindraenergy.com.

We request you to kindly take the same on records.

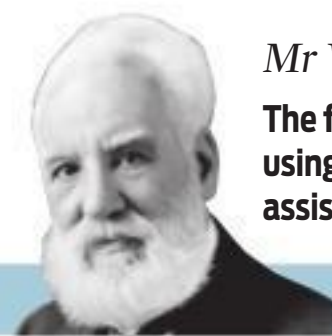
Thanking you.

Yours faithfully,

For Ravindra Energy Limited,

Vadiraj Mutalik

Company Secretary & Compliance Officer



Mr Watson — Come here — I want to see you
The first words uttered by Alexander Graham Bell using his invention - the telephone, calling out to his assistant, who was in another room

INTELLIGENT FORETELLER

AI MAGIC: DETECTING AGE, FORETELLING LIFE EXPECTANCY

A mere scan of your chest could soon reveal not only your age accurately, but will in future also foretell your life expectancy. This is the wonder of artificial intelligence, which researchers from Osaka Metropolitan University are developing.



Simply

SCIENTIFICO

Science is a world in itself. Here are some interesting facts that connect with you
Nirad Mudur

internal and external testing of the AI model for age estimation at three different facilities. The AI model recorded a correlation of 0.95 between AI-estimated age and chronological age — considered very strong.

OUT OF THIN AIR A SOLUTION FOR DRINKING WATER CRISIS FROM ATMOSPHERE

Researchers have finally found a solution that could keep an impending drinking water crisis at bay. They have found a process to extract water from atmospheric water vapour even in the driest and most arid regions of the world.

GOVERNMENT OF ODISHA OFFICE OF THE CHIEF CONSTRUCTION ENGINEER, RURAL WORKS CIRCLE, BOLANGIR 2nd Corrigendum Notice No. 1743 dated. 21.08.2023

Government of Odisha Office of the Chief Construction Engineer Rural Works Circle, Angul e-Procurement Notice for Bridge works in Odisha Bid Identification No. Bridge Online AGL-16/2023-24

TAMIL NADU WATER SUPPLY AND DRAINAGE BOARD INVITATION OF BIDS—TWO COVER-ITEMWAR TENDER SYSTEM (E-Submission)

In a revolutionary development that could see biological cross-breed with artificial intelligence (AI) to better understand the brain as well as improve AI systems with brain cells and neurons, researchers at the Massachusetts Institute of Technology (MIT), the MIT-IBM Watson AI Lab, and Harvard Medical School are at work trying to make artificial intelligence models biologically plausible.

The new study, attempting to bridge neuroscience and machine learning, offers insights into the potential role of astrocytes in the human brain, according to MIT News, citing the researchers' paper "Building transformers from neurons and astrocytes", published in open-access format by the Proceedings of the National Academy of Sciences (PNAS).

The revolutionary aspect involves implementing a powerful artificial intelligence model called transformer in the brain using networks of neurons and other brain cells called astrocytes. A transformer is a more powerful neural network model that can achieve unprecedented performance, including generating text from prompts with a near-human accuracy.

The researchers, in the study, have come up with a hypothesis that could explain how a transformer can be built using biological elements in the brain, and suggest that a biological network of neurons and astrocytes could perform the same core computation as a transformer.

The hypothesis exposes the potential of future neuroscience research into how human brains work, while also



help machine-learning researchers explain why transformers are so successful across a diverse set of complex tasks.

MIT News quotes Dmitry Krotov, a research staff member at the MIT-IBM Watson AI Lab and senior author of the research paper: "The brain is far superior to even the best artificial neural networks that we have developed, but we don't really know exactly how the brain works.

Transformers are found to be operating in a different manner as compared to artificial neural network models. According to the researchers, a recurrent neural network compares each word in a sentence with the previous words to determine what the next word would be; but a transformer compares all the words in the sentence at once to generate a prediction. This is a process called self-attention.

A NEW PATH-BREAKING STUDY BRIDGES MACHINE-LEARNING AND NEUROSCIENCE TO EXPOSE POTENTIAL ROLE OF BRAIN CELLS IN IMPROVING AI SYSTEMS, WHILE IMPROVING UNDERSTANDING OF OUR BRAIN'S WORKING

MAKING AI SYSTEMS BIOLOGICALLY PLAUSIBLE

According to Krotov, for self-attention to work, the transformer must keep all the words ready in some form of memory, which is biologically not possible in a brain due to the way neurons communicate. Neurons communicate one-on-one, but for self-attention to be realised, there needs to be a third neuron or brain cell to get involved to make it a three-way communication.

PLAYING THE ROLE OF THE THIRD NEURON

The researchers' hypothesis targets using astrocytes to play the role of the third neuron, and they are confident of realising transformer-like functions in the brain. There is a reason for considering astrocytes: during communication between two neurons, they send chemicals called neurotransmitters across the synapse that connects one neuron with the other

Memory, the researchers learnt that self-attention is possible in the human brain by involving three neurons.

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ed by wrapping its tentacle around the synapse to create a tripartite (three-part) synapse. One astrocyte may form millions of tripartite synapses. And non-neuronal cells like astrocytes are abundant in the brain, playing their role in physiological processes.

Analysis showed the researchers that their hypothetical biophysical neuron-astrocyte network matches a transformer. According to MIT News, the researchers conducted numerical simulations by feeding images and paragraphs of text to transformer models and comparing the responses to those of their simulated neuron-astrocyte network. Both responded to the prompts in similar ways, confirming their theoretical model. The researchers now plan to convert theory into practice.

FACT OF THE MATTER

Measuring dark energy through Andromeda

London: Researchers from the University of Cambridge found it may be possible to measure dark energy by studying Andromeda, our galactic next-door neighbour that is on a slow-motion collision course with the Milky Way.

How did the sabertooth tiger sound?

Raleigh (US): What noise did a sabertooth tiger make — a mighty roar or a throaty purr? A study from North Carolina State University examined data behind arguments for each vocalisation and found that it could depend on the shape of a few small bones.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಅರಣ್ಯ ಇಲಾಖೆ ಪಲ್ಲಕ್ಕಿ ಅರಣ್ಯ ಮತ್ತು ಕುಟುಂಬ ಕಲ್ಯಾಣ ಇಲಾಖೆಯವರ ಕಛೇರಿ, ಉಡುಪಿ ಪಟ್ಟಣ, ಉಡುಪಿ-576101. ದೂರವಾರ್ತೆ: 0820-2525566/2536650

GOVERNMENT OF ODISHA OFFICE OF THE CHIEF CONSTRUCTION ENGINEER RURAL WORKS CIRCLE, KENDRAPARA-JAJPUR. AT/PO- NAYABAZAR, CUTTACK -753004, Tel No. 0671-2444488, Email-serw_kpd@yahoo.com

ಬಳ್ಳಾರಿ ಜಿಲ್ಲಾ ಸರ್ಕಾರ ಕಾರ್ಯಾಲಯ, ಗ್ರಾಮೀಣ ಕೃಷಿ ಇಲಾಖೆ, ಕುಡ್ಲಿಪುರ, ಬೆಂಗಳೂರು. (E-Mail: serwbpr2004@yahoo.com, Tel/Fax: 0680-2404287)

Ravindra Energy Limited Regd. Off.: BC 105, Havelock Road, Camp, Belagavi - 590001, Karnataka, India. Notice of the 43rd Annual General Meeting to be held through VC/OAVM, Book Closure and E-Voting Information