## **I Alleged**

# **AI Crisis**

due to widespread

# Post-Selection Misconducts in All AI Areas

Misconduct 1: Cheating in the absence of a test Misconduct 2: Hiding bad-looking data

The Latest Discovery:
The Luckiest Performs Only Average in a Future Test

Defeating the Misconducts:

A Holistic Solution to 20 Million-Dollar Problems

### Visit

AI Crisis Dialogue in the IEEE CDS Newsletters <a href="https://www.cse.msu.edu/amdtc/amdnl/CDSNL-V18-N2.pdf">https://www.cse.msu.edu/amdtc/amdnl/CDSNL-V18-N2.pdf</a>

and

IJCNN 2024 Tutorial TN1: Conscious Learning vs. Deep Learning 8:30 -10:30 Sunday, June 30, 2024, Room 302 by Juyang Weng Brain-Mind Institute juyang.weng@gmail.com

## 6 [AI Crisis] Dialogue Initiation: Is AI in a Credibility Crisis?



Juyang Weng, Brain-Mind Institute and GENISAMA, USA Email: juyang.weng@gmail.com

On March 29, 2023, an open letter that calls for a six-month "AI pause" appeared as an online letter. "The signatories expressed a range of fears and apprehensions including about rampant growth of AI large-language models (LLMs) as well as of unchecked AI media hype" [1]. According to the widespread deep learning misconduct in the last three issues of this Newsletters (Vol. 17, No. 2 and Vol. 18, No. 1 and No. 2), that open letter appears now to be a false alarm triggered by the invalid Deep Learning misconduct in particular and Post-Selection in general. That open letter was signed by those who did not know about the misconduct.

In other words, almost all AI methods are cheating in the absence of a test and hide bad-looking data. Worse, my response to the Post-Selection Dialogue in this issue alleged further that Post-Selection is a Ponzi-like Pyramid scheme.

AI has been in different crises before, such as the reproducibility crisis [2] and resource crisis [3]. This time, the Post-Selection misconduct amounts to a new crisis—AI credibility crisis.

This dialogue calls for a discussion about this AI crisis. Each response can address one or several issues below.

- 1. Fatality: How fatal is Post-Selection misconduct? Is AI almost dead now? Can we revitalize AI?
- 2. Depth: How deep is the Post-Selection misconduct? If both symbolic AI and computational AI suffer from Post-Selection misconduct, are there any other authors who can provide a way to fill the depth of the Post-Selection difficulties?
- 3. Breadth: How many AI papers suffer from Post-Selection misconduct? Can you cite a few AI methods that are free from misconduct?

Prof. Kalanmoy Deb, in the area of Genetic Algorithms (GAs) wrote to me: "We did some ML model development using GAs in which we kept a training dataset and a validation dataset to find the optimized model and a disjointed test dataset to demonstrate optimized model's generalizing ability. There are some other GA studies like the above." I replied, "Please send me all such papers so that I can cite them in the next Dialogue. They set a good example." However, he did not send any. Prof. Deb also wrote, "In terms of your comment on hiding bad looking data, I mentioned that choosing the best performing solution from the entire GA run is not cheating. This is because algorithms use more evaluations to deal with a population-based algorithm and it is not cheating to select the best performing solution." I asked him to host a Dailogue but he did not reply. What do you think about Prof. Deb's statements?