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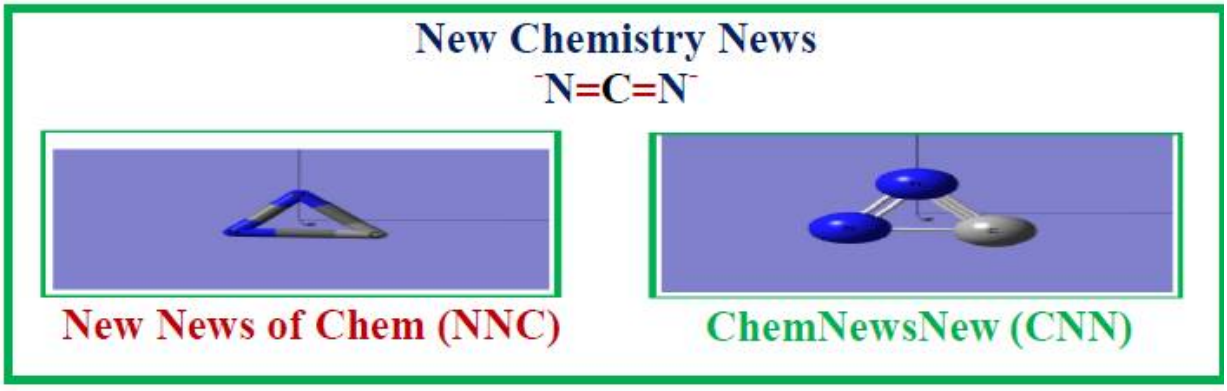

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...IntelligenceAugmentedMedicine...

Pulmonology

Part 1. Select references

Information Source	ScienceDirect.com;	
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Conspectus:"**Whatis AI (artificial intelligence) today ?**"It an outcome of cumulative evolutionary changes in Psychology, Philosophy, Mathematical/physical sciences over time (at least three centuries) through human intellect all over the world.

Heuristic rules, belief theory, fuzzy logic, stochastic approaches and statistical/mathematical methods were in the first and second phases of progress of AI in application domains. Neural nets (with single/multiple hidden layers), deep architectures (Cognitron, Neo-Cognitron), deep NNs

(Alex) belong to third phase that revolutionised not only AI, but has tremendous effect on every walk of life of not only experts but also lay men. Large language models (GPT, BARD etc.), and Transformers opened a new window into the corridors of AI-Ivory Towers (AI-IT). The ITO (Input transformed to output) operators/functions/modules embraced all most all mathematical (numerical/logical/ literal/) operators and their combinations popular elsewhere in computational paradigms.

The architectures (connections between unit processing units, called neurons in NN terminology) by now covered only a small fraction of combinations imagined/ not imagined by human intellect. The learning processes are diverse viz. supervised, un-supervised, semi-supervised or self-supervised. The range of parameters /weights range from one to ten trillions through billions/ millions. The goodness- of -fit-criteria are many like loss function, correlation, ROC etc. etc. In the context of NNs, feed-forward and back-propagation are developed.

If one looks with a rational mind, where is intelligence, it is there in every function, module, their inter connections. Thus, it is all pervading in different forms in the frame of solutions of tasks and sub-tasks.

This contribution incorporates select literature references on and Artificial intelligence in recent time period.

***Keywords*:** Artificial intelligence (AI); Pulmonology; Medical diagnosis; Research references; Covid-19; Cancer; Adema; Nodules;
CNN : [C [Computations; Computer; Chemistry] NN [New News; News New; Neural Nets; Nature News; News of Nature;]]

AI.Pulmonology
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Energy (BosonTo Universe)

Deep Learning (AI) + Deep Thinking (Physics) →

Deeper Understanding (AI.Phys.AI)

Energy (UniverseDown_to$_{Boson}$)