Plagiarism Scan Report

Summary	
Report Genrated Date	30 Mar, 2018
Plagiarism Status	**82% Unique**
Total Words	527
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Content Checked For Plagiarism:

Artificial Intelligence - AId to Health Care

Question ?	Answer !
writer	Rajni Dabas - MSc 1st year
Editor	Jatin
status	Under Review
Plagiarism	Moderate 36% [Report link](./plag_reports/plag_aid_in_healthcare.pdf)
Content	Need work - plag, sentence structure, grammar, actual important content
Verdict	Remove Plag. Finish Review. Good Candidate.

The Relevance of AI in medical research can be traced back to early 1970s, when MYCIN, one of the earliest backward chaining expert systems used artificial intelligence to identify bacteria causing severe infections, and then recommend antibiotics, with the dosage adjusted according to patient's body weight. MYCIN was also successful in the diagnosis of blood clotting diseases.
And then in November 2017, a team of researchers from Indian Institute of Science Education and Research (IISER), Kolkata and Indian Institute of Technology (IIT), Kanpur developed an AI-based algorithm called the
'MFDFA-HMM/SVM Integrated Algorithm'. The algorithm differentiates between the normal and the pre-cancerous tissues. It possible to determine the different stages of the disease within a few minutes, with accuracy exceeding 95%. The algorithm has been tested on in-vitro cancer samples. The team is now expanding the investigation to study in vivo samples for precancer detection.
From MYCIN to HMM, from mere bacterial infection diagnosis to cervical cancer detections, AI has helped medical science since the beginning.

AI is being actively used for data management in healthcare.
The 'Google DeepMind Health Project' launched by the Google AI Research Branch is being used to mine medical records to provide better and faster health services. This can be used to record health history for individuals and their family and help in better diagnosis. Major steps include data collection, it's storage, normalization, and tracing its lineage.
AI promises a huge impact on Genetics & Genomics. Craige Venter, one of the fathers of Human Genome Project is working on an algorithm that could design patients' physical

characteristics based on their DNA.

> “ AI began with an ancient wish to forge the gods.” -Pamela McCorduck

What’s next?
Today, machines are capable of crunching vast amounts of data and identifying patterns that humans cannot. AI systems have helped us utilize this data to transform mere e-filing cabinets into a full-fledged assistant to doctors aides that can deliver relevant, high-quality data in real time.

The advancement in AI has presented healthcare sector with exciting opportunities to drastically improve while cutting the costs. Assisting repetitive jobs, online medical consultations, health assistance, medication management, drug creation are some of the infinite applications of AI in healthcare.

While the AI systems are increasingly becoming common in the healthcare organizations, their existence should only be to support people in their jobs, not throw them out of their jobs. For example, when developing drugs, scientists need to choose target molecules from a set of possible candidates using which they usually do on instinct or guesswork. AI can work as a “helper” here to perform the task much more efficiently and effectively.
AI is enabling healthcare professionals in the quick diagnosis of diseases, better clinical decisions and has helped researchers innovate quickly by failing fast en route. Exciting times ahead.