A Review on Analysis of Artificial Intelligence in Machine Learning

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Abstract—Artificial Intelligence in machine learning is a present evolving technology and this has a scope to change the future manufacturing industry across the world. So in this paper we can able to notice the advantages and stages of evolution and disadvantages, applications of Artificial Intelligence in Machine learning can change mechanical engineering and so several user industries implementation has already begun. The data analysis by using the knowledge of computer and taking decision according to the situation is known as "artificial intelligence" Which plays a key role in mechanical industries.

Keywords — Artificial Intelligence, data analysis, machine learning, mechanical industry.

I. INTRODUCTION

Artificial Intelligence is one of the most evolving technologies in the mechanical field. We can see the automation in the many industries. Now-a-days many industries are depending on artificial intelligence to do their work. Artificial intelligence can bring the new revolution in the mechanical industries by using the available resources to their optimum and bring the maximum output out of it. As we know AI can replace the workers in the industry but it works more effectively than the humans. There are many applications of AI in industries.

Industries will face the problem of inspection, quality control, and exact measurements of the work piece but by using AI we can solve these problems at once. We can see the condition of work piece as good as the fine part as it will be manufactured by the machine without interference of humans. The present stage of AI is not completely available to the every industry to manage

their complete work but at the present stage it will assist the process of manufacturing. The complete automation will be possible because the AI is capable of doing such a complex task easily. It will be speed and accurate in solving the complex problems within less time.

II. LITERATURE REVIEW

APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN MACHINE LEARNING:

A. Quality Inspection

Quality inspection will play an important role in industry. As the quality of the product can be considered to be the most complex feature of the work piece but by using AI this problem can be solved very easily.

B. Fault analysis

When we manufacture any work piece wrong it will be considered as the fault work piece but many of the fault work piece can be reused and come faults can be solved. By using the AI we will come across the reason for the fault of the work piece and the solution of the fault piece designed.

C. Speed and Accuracy

The speed and accuracy of the machine will be increased while using AI as the AI will run by using Algorithm, which gives the most accurate result.

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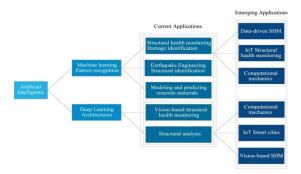


Fig- 1: AI current and future developments

III.USES OF AI IN MECHANICAL INDUSTRY:

- [1] The supply chain inside the industry can be managed by using the Artificial Intelligence. [1]
- [2] Artificial Intelligence can be helped to find the quality of the work piece in every stage of manufacturing. [2]
- [3] Artificial Intelligence can be used to allocate works to the workers in the Industry. [3]
- [4] The advancement in the AI can even recruit the required persons for the Industry based upon their personality. [4]
- [5] We can even use AI for deep monitorisation of works inside the Industry. [5]

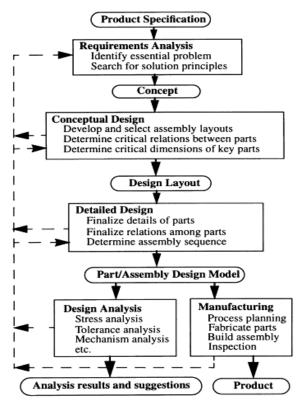


Fig – 2: Basic manufacturing process algorithm for AI in Mechanical Industry.

- [6] We can manufacture more number of products in less time by using the AI as it can handle machines to give maximum output out of it. [6]
- [7] We can even get the advanced reports like which product is in trend and what should be manufactured by the industry by using Artificial Intelligence. [7]

IV. CONCLUSION

Artificial intelligence is the best way to upgrade the manufacturing industry in mechanical field. We can use it in many aspects starting from recruitment to allocation of job inside the industry. We can increase the output and decrease the time taken to manufacture the products in the factory. We can design the supply chain and the Artificial Algorithms will correct it according to their requirement, we have to design the code only once but it will repeat the process as many times as we want.

So the artificial Intelligence is going to be one of the most important features in the mechanical industry.

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