COMP1004 Essay

Student Name: VENKATESAN Jyotsna; Student ID: 22108825D

Artificial Intelligence (AI) is an immensely vast topic with so many possibilities of influence in various fields such as Biology, Education, Finance, and more. AI also has an adverse influence on my discipline, Computing and AI. Computing and AI is a dynamic field with constant advancements and evolutions. With the rapid growth of AI, numerous changes have been made to the field and workspace using the advanced technological advantages of Artificial Intelligence.

One of the main goals of AI is to enable computers and other machines to perform functions including problem-solving, decision-making, perceiving, and interpreting human communication. Hence, the functions of AI could eliminate the concept of repetition of tasks in work. Automation is a key benefit of the evolution of AI. The advancement of AI could benefit people by automating the monotonous workloads that had to be carried out by people. Doing this will speed up the process of work completed while also achieving greater accuracy. Thus, making the performance of employees more efficient.

In Computer science, data security is a pivotal aspect to consider. The growth of AI has helped overcome the battle against information threats in several ways. AI is quick to respond to threats and can quickly identify them using pattern recognition and complex algorithms [1]. Malware damage, phishing attack risks, malicious code, and other cybersecurity issues could be tackled using AI-based modeling [2]. The high capability also reduces the cost spent to recruit personnel to work for data security.

Recent studies have been looking to implement AI in fog and cloud computing. According to Sukhpal et al [3], work has been done to use AI to optimize "scheduling policies on the cloud", distribution systems, and virtualization algorithms. Since AI allows the decision-making process to be automated while being highly efficient and quick, AI is a great way to enhance large systems. AI also hopes to improve the working of fog nodes and IoT by reducing the cost of infrastructure and bringing down power consumption.

I look to potentially work towards software development in the future. Exploring the field of software development in particular, AI techniques have been and can further be implemented to optimize the procedure of development. Code can be automatically generated by AI to create software. Graphical User Interface (GUI) could also be tested using Artificial Intelligence [4]. However, AI may not be able to completely take over the software development industry. Software development is a very human-intensive field and requires problem-solving and logical thinking skills only humans can provide for now. However, further automation of code generation can help alleviate the tasks for developers.

Computing and AI is a constantly developing field. With the parallel and rapid development of Artificial Intelligence, the advancement of the two fields has been accelerated. Multiple companies have been looking to incorporate more AI into their work as AI has been and will continue to transform my discipline.

References:

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