**Future Application of Artificial Intelligence into Computer Network Technology**

**Introduction**

Artificial Intelligence (AI), a crucial branch of modern computer science which researches and develops for simulating, extending and expanding human intelligence theory, methods, techniques and applications, has been known as one of the world's cutting-edge technologies in 21st century that exert profound influence on the future life of human beings. Simultaneously, marvelous progress artificial intelligence has achieved accelerates the update and reform of computer network technology both in basic theoretical framework and practical application, which is bound to facilitate relevant interdisciplinary research.

Concentrating on the exploration of further application of artificial intelligence into computer network technologies, numerous studies has been performed in recent years. Qi Wang et al. (2016) analyzed the close relationship between computer network and artificial intelligence and the huge benefits AI could bring to the solution of several critical problems in computer network technology. Besides, the network security management and system evaluation has been carefully discussed to broaden the applicable methods of artificial intelligence (Ganghua Yao, 2016). More specifically, Yu Zhang (2016) utilized an artificial intelligent algorithm to optimize a design of distributed computer network. Furthermore, detailed advantages and innovative application of artificial intelligence in the perfection of computer network has been researched under the background of Big Data Era (Hong Xueyin & Li Yajuan, 2018; Zhao Banghua, 2018). However, it is worth noting that few previous studies pay attention to the application of artificial intelligence in cloud computing and machine learning which play vital roles in the development of computer network technology.

The main purpose of this article is to explore the possibility of applying multiple intelligent algorithms in the field of artificial intelligence into the realization of cloud computing and machine learning to promote current computer network technology. In order to achieve the goal, Analytic Hierarchy Process (AHP) combined with neural network algorithm is adopted to carry out decision analysis when testing the feasibility of each approach. Moreover, a mathematical model based on Multiple Linear Regression (MLR) is established to take all the important factors and environmental variables into consideration during the whole research.