



# ADVANTAGES OF 5G TECHNOLOGY AND ITS CONTRIBUTION TO THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE

Erkan ATALAY<sup>1</sup>

## Introduction

Communication technologies in today's world; outside communication and meet business requirement; comfort, supporting flexible life models, social networks, Internet of Things (IoT), health, energy management, labor productivity, management and security. Different needs and scales of communication technologies are used in each field. With the introduction of mobile devices, rapid data transfer, network structure that can identify millions of devices, fast processors and software supporting them have been developed. In this context, while the communication technologies have been developed and put into use in big time frames, 5G technology will be put into service before the expected usage period of 4G technology has expired. Developments in mobile applications, Industry 4.0 and IoT make this necessary.

Nowadays, the capacities of magnetic recording fields are increasing and faster operations can be performed with smaller devices. As a natural result of this process, the stored data is increasing, and many techniques are developed to obtain information from artificial intelligence, to identify the pattern between them, to optimize the situation and to perform rapid analyses. The use of Artificial Intelligence technologies is increasing thanks to Quantum computers, which is a powerful technology although it is new. For artificial intelligence research, which is expected to shape the future to a great extent, institutions and organizations in many states establish a separate unit and allocate high budgets. As a country, this technology should be developed, supported and should be supported and projected at the undergraduate and graduate levels by bringing together different disciplines as it can benefit many disciplines.

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<sup>1</sup> Burdur Mehmet Akif Ersoy University, Turkey, erkanatalay@mehmetakif.edu.tr.

ing the amount of hardware processing power and memory in mobile devices will enable artificial intelligence applications in the fields of agriculture, animal husbandry, health and health.

As a result, the effects of 5G technology on artificial intelligence will be quite high. Artificial intelligence applications, which are not yet used in many sectors, will increase rapidly. Artificial intelligence algorithms and technologies that are currently being used and under development will continue to develop rapidly. Fast access to big data, the emblem of the number of devices connected to the network, the reduction of network delays should be seen as a set of technological advances that may open the new era in artificial intelligence.

**Keywords:** 5g Technology, artificial intelligence, advantages Of 5g.

### References

1. GSMA Intelligence, <https://www.gsmainelligence.com/> (E.T: 4 November 2019)
2. uSwitch, (2019), History of mobile phones and the first mobile phone, (E.T: 21 February 2019), <https://www.uswitch.com/mobiles/guides/history-of-mobile-phones/> . (E.T: 5 November 2019)
3. Rosenberg, Don; (2018), How 5G will change the world, World Economic Forum, (E.T: 18 January 2018), <https://www.weforum.org/agenda/2018/01/the-world-is-about-to-become-even-more-interconnected-here-s-how/>. (E.T: 20 March 2019)
4. Horwitz, Jeremy; (2018), World's 'first' commercial 5G network launches in Qatar, Venturebeat, (E.T: 14 May 2018), <https://venturebeat.com/2018/05/14/worlds-first-commercial-5g-network-launches-in-qatar/> . (E.T: 5 November 2019)
5. Rosenberg, Don; (2018), "How 5G will change the world", World Economic Forum, (E.T: 18 January 2018), <https://www.weforum.org/agenda/2018/01/the-world-is-about-to-become-even-more-interconnected-here-s-how/>. (E.T: 20 March 2019)
6. Türk Telekom 5G+ Bilgi Notu: 5GTT (E.T: August 2018) <https://www.turktelekom.com.tr/hakimizda/duyurular/Documents/tt-5g-final-version-03082018.pdf>. (E.T: 08 November 2019)
7. Köroglu, Y. (2017). *Yapay Zekâ'nın Teorik ve Pratik Sınırları*.
8. Nabyev V. V., *Yapay Zeka*, Ankara, Seçkin Yayıncılık, ISBN:978-975-02-2034-0
9. H. Akpınar, *Data, Veri Madenciliği Veri Analizi*. İstanbul: Papatya Yayıncılık, 2014.
10. Oracle Artificial Intelligence (AI)—Yapay Zekâ Nedir? <https://www.oracle.com/tr/artificial-intelligence/what-is-artificial-intelligence.html> (E.T: 08 November 2019)