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### A BRIEF DESCRIPTION ON BIG DATA

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### ABSTRACT

*Big data refers to data or data sets that are so big or complicated that conventional data processing application are insufficient, necessitating the use of distributed databases. Big data has always been at the heart of companies like Google, eBay, LinkedIn, and Facebook. It's a collection of large and complex data sets that includes massive amounts of data, social media analytics, data management capabilities, real-time data, and so on. Sensor design, data curation, sharing, storage, analysis, visualization, and information privacy are all challenges. Big data refers to datasets with a lot of diversity and velocity, making conventional tools and methods challenging to manage. Big data analytics is the study of large amounts of data in order to uncover hidden correlations. Big Data is a kind of data whose complexity necessitates the development of new methods, algorithms, and analytics to manage it and extract value and hidden information. We need a new platform known as Hadoop as the fundamental platform for organizing Big Data and solving the issue of making it usable for analytics.*

**KEYWORDS:** *Big Data, Challenges, Parallel Programming, Map Reduce Technique.*

**REFERENCES:**

1. A. Oussous, F. Z. Benjelloun, A. Ait Lahcen, and S. Belfkih, "Big Data technologies: A survey," *Journal of King Saud University - Computer and Information Sciences*. 2018, doi: 10.1016/j.jksuci.2017.06.001.
2. A. Gandomi and M. Haider, "Beyond the hype: Big data concepts, methods, and analytics," *Int. J. Inf. Manage.*, 2015, doi: 10.1016/j.ijinfomgt.2014.10.007.
3. W. A. Günther, M. H. Rezazade Mehrizi, M. Huysman, and F. Feldberg, "Debating big data: A literature review on realizing value from big data," *J. Strateg. Inf. Syst.*, 2017, doi: 10.1016/j.jsis.2017.07.003.
4. B. Data, B. Data, and B. Data, "Big Data." <https://medium.com/@raghav0278/what-is-big-data-and-why-is-it-important-15afe114b8b7> (accessed Aug. 01, 2017).
5. E. Al Nuaimi, H. Al Neyadi, N. Mohamed, and J. Al-Jaroodi, "Applications of big data to smart cities," *J. Internet Serv. Appl.*, 2015, doi: 10.1186/s13174-015-0041-5.
6. R. Kitchin and G. McArdle, "What makes Big Data, Big Data? Exploring the ontological characteristics of 26 datasets," *Big Data Soc.*, 2016, doi: 10.1177/2053951716631130.
7. M. M. Najafabadi, F. Villanustre, T. M. Khoshgoftaar, N. Seliya, R. Wald, and E. Muharemagic, "Deep learning applications and challenges in big data analytics," *J. Big Data*, 2015, doi: 10.1186/s40537-014-0007-7.
8. C. H. Lee and H. J. Yoon, "Medical big data: Promise and challenges," *Kidney Res. Clin. Pract.*, 2017, doi: 10.23876/j.krcp.2017.36.1.3.
9. A. Zwitter, "Big Data ethics," *Big Data and Society*. 2014, doi: 10.1177/2053951714559253.
10. "Big-data-map-reduce-process-22." [https://www.researchgate.net/figure/Big-data-map-reduce-process-22\\_fig4\\_317825624](https://www.researchgate.net/figure/Big-data-map-reduce-process-22_fig4_317825624) (accessed Aug. 01, 2017).