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Distributed Systems (CT-509)

Project proposal

Abstract

Data Science is a scientific technique to unfold the hidden mystery of data and extract the valuable insight that can boom the business needs, beware of what probably be happened in near future and most importantly make human to act that react on things. Nowadays, data is the key element that use to classify and aids in to foretell each and every aspect of human; behavior, nature, standards, lifestyle, passion, desire, business needs and lot more uncountable. But, data is not so simple nor resides in any specified form. This usually be available in any of 4Vs; Volume, Velocity, Verity and Veracity. Due to complex nature of data, many organization, scientist and practitioners suffer trouble to incorporate them in a suitable platform, desirable tools, libraries and other supportives. Also, data science itself not a separate field of study, but it’s a composition of several incorporating fields – Information Technology, Statistics and Science. The core propose of this study presents the generic platform model for data science practitioner and professionals. In this work, we will explore each aspect and compositor of data Science, drill down to identify individual field hierarchy, tools, and platform available. Furthermore, it covers the concise comparison study renewed and most preferable element in each filed. The study, will beneficial in building a generic platform and composite tool that will ease the practitioners to learn more, building better and flexible system and more compatible integrating features.

# Objectives

To list down the technology, algorithms, tools and their comparison for

1. Big data
2. Data Analytics
3. Algorithms/Methods

# Targeting Conference

Timely, not targeting any conference yet. Will add in near future.

# References

If anyone would like to add online PDF/source file links add here. Otherwise shared via following google drive

<https://drive.google.com/drive/folders/1kN4d49MhpUI217pM57NGI8N50xwKLpC6?usp=sharing>

Following paper uploaded to google drive.

[1] I. Yaqoob *et al.*, “International Journal of Information Management Big data : From beginning to future,” *Int. J. Inf. Manage.*, vol. 36, no. 6, pp. 1231–1247, 2016.

[2] B. M. S. Thillaieswari, M. Phil, and B. Ed, “Comparative Study on Tools and Techniques of Big Data Analysis,” *Int. J. Adv. Netw. Appl.*, vol. 66, no. 61, pp. 61–66, 2017.

[3] D. Singh and C. K. Reddy, “A survey on platforms for big data analytics,” *J. Big Data 2014,* vol. 1, no. 8, pp. 1–20, 2014.

[4] A. Siddiqa, I. A. Targiohashem, I. Yaqoob, M. Marjani, A. Gani, and F. Nasaruddin, “A Survey of Big Data Management: Taxonomy and State-of-the-Art,” *J. Netw. Comput. Appl.*, vol. 71, no. August, pp. 151–166, 2016.

[5] T. L. Coelho, R. P. Magalh, and D. Ara, “Big Data Analytics Technologies and Platforms : a brief review,” in *CEUR Workshop Proceedings*, 2018, pp. 25–32.

[6] A. Oussous, F. Benjelloun, A. A. Lahcen, and S. Belfkih, “Big Data Technologies : A Survey,” *J. King Saud Univ. - Comput. Inf. Sci.*, vol. 30, no. 4, pp. 431–448, 2018.

[7] R. Kune, P. K. Konugurthi, and A. Agarwal, “The anatomy of big data computing,” *Softw. Pract. Exp.*, vol. 46, no. October 2015, pp. 79–105, 2016.

[8] J. Williamson, *Getting a Big Data Job For Dummies*. John Wiley & Sons, Inc., 2015.

[9] F. Tekiner and J. A. Keane, “Big Data Framework,” in *IEEE International Conference on Systems, Man, and Cybernetics*, 2013, pp. 1494–1499.

[10] C. W. Tsai, C. F. Lai, H. C. Chao, and A. V Vasilakos, “Big data analytics : a survey,” *J. Big Data*, vol. 2, no. 21, pp. 1–32, 2015.

[11] C. L. P. Chen and C. Zhang, “Data-intensive applications , challenges , techniques and technologies : A survey on Big Data,” *Inf. Sci. (Ny).*, vol. 275, no. August, pp. 314–347, 2014.

[12] P. Pääkkönen and D. Pakkala, “Reference Architecture and Classification of Technologies , Products and Services for Big Data Systems,” *Big Data Res.*, vol. 2, no. 4, pp. 166–186, 2015.

[13] A. Gandomi and M. Haider, “Beyond the hype : Big data concepts , methods , and analytics,” *Int. J. Inf. Manage.*, vol. 35, no. 2, pp. 137–144, 2015.