


Healthcare Industry and its Enhancement using Machine Learning: An Overview

K. Sreekumar 

Associate Professor, SRM Institute of Science and Technology (SRM University), TN,
India

Email: sree_mani@hotmail.com

Abstract

This paper presents the effect of AI in the Medical services industry. AI (ML) is a subclass of computerized reasoning innovation, where calculations process huge informational indexes to recognize designs, gain from them, and execute undertakings independently without being told precisely how to resolve the issue. Lately, the wide accessibility of strong equipment and distributed computing has brought about a more extensive reception of ML in various areas of living souls, from involving it for proposals via online entertainment to taking on it for process robotization in plants. Also, its reception will just become further. Medical care is an industry that stays aware of the times also. With how much information is created for every patient, AI calculations in medical services have extraordinary potential.

Keywords: Healthcare, Social media, Automation, Adoption, Modeling, Strategy.

Introduction

AI procedures can be applied to settle a wide assortment of undertakings. With regards to utilizations of AI in medical care, these undertakings include:

- Characterization — AI calculations can assist with deciding and naming the sort of illness or clinical case you're managing;
- Proposals — AI calculations can offer important clinical data without the need to look for it effectively;
- Bunching — AI can assist with gathering comparative clinical cases to dissect the examples and lead research from now on;

This is a limited preview of the chapter.

To read the full-text chapter, get access by purchasing this chapter or consider buying the complete book. If your library has subscription to EBSCOhost, this chapter including other chapters of the book can be accessed through your library.

This chapter is a part of the book, '*Advances in Business Informatics empowered by AI & Intelligent Systems*'

ISBN: 978-81-957322-0-3 (ebk); ISBN: 978-81-957322-1-0 (pbk);
ISBN: 978-81-957322-2-7 (hbk)

Book DOI: <https://dx.doi.org/10.46679/9788195732203>

The book is available via CSMFL Bookstore, Amazon, Google Play Books, EBSCOhost & EBSCO eBooks

via online entertainment to taking on it for process robotization in plants. This paper also shows that AI calculations in medical services have extraordinary potential.

References

- Abdelaziz Abdelaziz, A., Elhoseny, M., Salama, A. S., & Riad, A. M. (2018). A machine learning model for improving healthcare services on cloud computing environment. *Measurement*, *119*, 117–128. <https://doi.org/10.1016/j.measurement.2018.01.022>
- Ahmad, M. A., Eckert, C., & Teredesai, A. (2018). Interpretable Machine Learning in Healthcare. Proceedings of the 2018 ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics. <https://doi.org/10.1145/3233547.3233667>
- A. Jabbar, M., Samreen, S., & Aluvalu, R. (2018). The Future of Health care: Machine Learning. *International Journal of Engineering & Technology*, *7*(4.6), 23. <https://doi.org/10.14419/ijet.v7i4.6.20226>
- Char, D. S., Abràmoff, M. D., & Feudtner, C. (2020). Identifying Ethical Considerations for Machine Learning Healthcare Applications. *The American Journal of Bioethics*, *20*(11), 7–17. <https://doi.org/10.1080/15265161.2020.1819469>
- Dalal, K. R. (2020, July 1). *Analysing the Implementation of Machine Learning in Healthcare*. IEEE Xplore. <https://doi.org/10.1109/ICESC48915.2020.9156061>
- Dhillon, A., & Singh, A. (2019). Machine Learning in Healthcare Data Analysis: A Survey. *Journal of Biology and Today`s World*, *8*, 1-10.
- Jain, V., & Chatterjee, J. M. (Eds.). (2020). Machine Learning with Health Care Perspective. Learning and Analytics in Intelligent Systems. <https://doi.org/10.1007/978-3-030-40850-3>
- Kaur, P., Sharma, M., & Mittal, M. (2018). Big Data and Machine Learning Based Secure Healthcare Framework. *Procedia Computer Science*, *132*, 1049–1059. <https://doi.org/10.1016/j.procs.2018.05.020>
- Kishor, A., Chakraborty, C., & Jeberson, W. (2020). A Novel Fog Computing Approach for Minimization of Latency in Healthcare using Machine Learning. *International Journal of Interactive Multimedia and Artificial*

- Intelligence, In Press*(In Press), 1.
<https://doi.org/10.9781/ijimai.2020.12.004>
- Li, Y., Shan, B., Li, B., Liu, X., & Pu, Y. (2021). Literature Review on the Applications of Machine Learning and Blockchain Technology in Smart Healthcare Industry: A Bibliometric Analysis. *Journal of Healthcare Engineering, 2021*, 1–11. <https://doi.org/10.1155/2021/9739219>
- Marwan, M., Kartit, A., & Ouahmane, H. (2018). Security Enhancement in Healthcare Cloud using Machine Learning. *Procedia Computer Science, 127*, 388–397. <https://doi.org/10.1016/j.procs.2018.01.136>
- Mozaffari-Kermani, M., Sur-Kolay, S., Raghunathan, A., & Jha, N. K. (2015). Systematic Poisoning Attacks on and Defenses for Machine Learning in Healthcare. *IEEE Journal of Biomedical and Health Informatics, 19*(6), 1893–1905. <https://doi.org/10.1109/jbhi.2014.2344095>
- Mustafa, A., & Rahimi Azghadi, M. (2021). Automated Machine Learning for Healthcare and Clinical Notes Analysis. *Computers, 10*(2), 24. <https://doi.org/10.3390/computers10020024>
- Panesar, A. (2019). *Machine Learning and AI for Healthcare*. Apress. <https://doi.org/10.1007/978-1-4842-3799-1>
- Qayyum, A., Qadir, J., Bilal, M., & Al-Fuqaha, A. (2021). Secure and Robust Machine Learning for Healthcare: A Survey. *IEEE Reviews in Biomedical Engineering, 14*, 156–180. <https://doi.org/10.1109/rbme.2020.3013489>
- Siddique, S., & Chow, J. C. L. (2021). Machine Learning in Healthcare Communication. *Encyclopedia, 1*(1), 220–239. <https://doi.org/10.3390/encyclopedia1010021>
- Waghade, S. S., & Karandikar, A. M. (2018). A comprehensive study of healthcare fraud detection based on machine learning. *International Journal of Applied Engineering Research, 13*(6), 4175-4178.
- Wiens, J., & Shenoy, E. S. (2017). Machine Learning for Healthcare: On the Verge of a Major Shift in Healthcare Epidemiology. *Clinical Infectious Diseases, 66*(1), 149–153. <https://doi.org/10.1093/cid/cix731>
-