A Study on Application of Data Mining in Ayurinformatics

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Abstract

Ayurveda - the traditional medicine system of ancient India, which nourishes an individual’s physical strength and intelligence along with maintaining a wonderful balance with the environment. Deviant to its nature, it has now become an inactive magnificence. Neither the research methodology nor the text book has changed over the past 50 years and paving way for the modern medicine system to progress. This work gives a convincing solution for Ayurveda to regain its lost glory with the incorporation of Information Technology, Data mining, Statistics and Bioinformatics, thus forming a new venture named Ayurinformatics. To prove this, relevant information's were collected from various literatures of Ayurveda and data mining algorithms. The findings reached by the implementation of data mining algorithms like k-Means algorithm, Canny Edge detection algorithm, Decision support systems, etc., for finding a better research methodology to identify a better treatment method, has made a significant cutback in both time and money than modern medicine system does. This was apparent by the identification of using methods like k-means algorithm to cluster ayurvedic medicines, prediction methods for Bronchial Carcinoma- a type of cancer, Canny Edge Detection Algorithm for Medicinal Plants
Disease Identification and AVD with Transitive text mining algorithm for extracting ayurvedic texts from biological databanks. This work strongly enforces that Ayurinformatics gives a new way of life to Ayurveda with its innovative approach to research methodology and better treatment identification methods.

References

3. Dr. M.S. Baghel, Need of new research methodology for Ayurveda, Journal of research in Ayurveda, 2011 Jan-Mar; 32(1)
5. Sanjeev B. Sarmukaddam, Interpreting “statistical hypothesis testing” results in clinical research, Journal of Ayurveda & Integrative Medicine | April-June 2012 | Vol 3 | Issue 2

Index Terms

Computer Science  Information Sciences

Keywords

Ayurinformatics, Ayurveda, Bioinformatics, Data mining, Data mining algorithms, Information Technology, Research Methodology, Statistics.