

MDVMI: A SYSTEM FOR ANALYZING AND VISUALIZING MULTIDIMENSIONAL RELATIONAL DATABASE FOR MEDICAL IMAGES

JAGBIR SINGH GILL¹ & KULVINDER SINGH MANN²

¹Department of CSE, Guru Nanak Dev Engineering College, Ludhiana, Punjab, India

²Department of CSE, Associate Professor, Guru Nanak Dev Engineering College, Ludhiana, Punjab, India

ABSTRACT

In recent era, the visualization of large dataset of medical images is one of the significant problems and has captured noteworthy attention of research community. Due to rapid growth of medical field after computerization, it became necessary to keep electronic medical record. The amendments in laws related to medical field further made it mandatory to maintain the electronic medical record.

The vast growth in size of databases in medical images created hurdles in analyzing and visualizing the medical images which turned out to be a time consuming and complex process. So there was a very strong need of innovation in the field of Health information management with a special focus on visualization of medical images. Visualization is the graphical presentation of information with the goal of helping the user gain a qualitative understanding of the information. In present study, an approach MDVMI (Multi-Dimensional Visualization of Medical Images) is developed as an answer to the above problem. MDVMI is a combination of various scientific calculations. This system gives precise results after clustering and is a scalable framework for data visualization which computes clustering and measures data abstraction quality.

KEYWORDS: Clutter, Clustering, Texture, HDM, K-Mean, Visualization