Abstract

High incidence of abdominal cancer cases in Asia has triggered a need to develop an effective automated classification of Endoscopy images based on stomach abnormalities. Currently a computer-based search for endoscopic image is not employed. The only method that is used to search an image from large image Database is manual. The images are searched one by one
by the doctor amounting to lot of expert time and also may lead to subjective and probable erroneous decisions. The proposal is therefore made to develop a new technique for automated analysis and search of the endoscopic images based on stomach abnormalities. The proposed method involves creating and maintaining Relational Database Management System (RDBMS) for endoscopic image. It is used to classify endoscopic images to normal and potentially abnormal categories. This work proposes an automated way to differentiate between the images quickly. In this method the database is set by user i.e. doctor or any technician. The proposed technique then differentiates the abnormal image from the normal and then categorized into Tumor, Ulcer, Cancer or Polyp as individual classes. A computer-assisted method for automated endoscopic image search and analysis has been proposed. Initial results suggest the feasibility of the proposed method for stomach abnormalities. The proposed new computer-assisted endoscopic analysis method is devised to be beneficial for automatic classification of the images.

Reference

- A Rule-Based Method for Automated Footprint Localization and Classification of Small Species Haokun Geng, Cheryl Mills, Radu Nicolescu, and Reinhard Klette Department of Computer Science, University of Auckland, Private Bag 92019 Auckland, New Zealand.

Index Terms

Computer Science

Image Processing
Key words

- Abdominal abnormalities
- Image Classification
- Image Analysis