Cutting edge in Biomedical Imaging.

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Introduction

Biomedical imaging involves the complex chain of acquiring, processing, and visualizing structural or functional images of living objects or systems, including extraction and processing of image-related information. Bioengineering is the application of the life sciences, physical sciences, mathematics and engineering principles to define and solve problems in biology, medicine, health care and other fields. Journal of Biomedical Imaging & Bioengineering has been designed for the wider dissemination and diffusion of new inventions and developments in the field of analytical methodologies and imaging techniques to the enthusiastic readers and potential researchers

Discussion

In current volume 3, various aspects of Biomedical Imaging were discussed by the authors from different parts of the world. In the research article, Chauhan SS, et al. studied SHCS algorithms based on analysis of Eigen values of Hessian matrix is popular in detection of MA, HMA and Exudates. But for the retinal image with exudates it wrongly detects MA and HMA around exudates [1].

Zhang J et al. in their study suggested that the elderly patients with bedridden use a closed-loop health education system based on automatic feedback based on doctor's advice and structured assessment. The complication rate can be significantly reduced and has high clinical value [2].

Fria Hossein et al. demonstrated the super capability of CVP for tissue imaging in medicine. The CVP signal measured from animal tissue (pork) using our current instrumentations, and demonstrated that, CVP can reveal specific physiochemical structures of colloids or tissue which the conventional ultrasound technique cannot see. The three different samples (M, MF, and LMB) have been tested on CVP imaging and 1D (URD) [3].

Hamed Hakkak et al. in their research article stated that advertising used in their study had a positive impact on the advertised brand (Sony) and had negative or almost no effect on the others. Although the features used for classifiers were average of selected features of 12 brands, which was used for all brands, and it was expected that errors increase, the accuracy of the output is acceptable. Due to fewer errors, neural network is better than SVM whereas SVM is more cost effective because of the low volume of data [4].

References

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