Publications

List of my publication related to this Thesis

Journal Publications


[7] Indra Kanta Maitra, Sanjay Nag and Samir K Bandyopadhyay, "Detection and Isolation of Pectoral Muscle from Digital Mammogram: An Automated Approach"


**Conference Publications**


[2] Samir K Bandyopadhyay and **Indra Kanta Maitra**, "Pre-processing of Digital Mammogram", IEEE 7th International Conference and Expo on Emerging Technologies for a Smarter World (CEWIT2010), Songdo Convensia Convention Center in Incheon, Korea, 2010

List of Corrections

The PhD thesis evaluation report of a respected examiner contains valuable comments, suggestions for certain structural modifications and incorporation of new sections. The changes made as per the valuable suggestions of the examiner and under the observation of supervisor are listed below.

- Re-organisation of the thesis chapters.
- Merging of Chapter 2 (Breast Cancer) and Chapter 3 (Mammography and Computer Aided Diagnosis (CAD)) into a single Chapter 2 (Breast Cancer and Mammogram CAD System).
- Merging of Chapter 7 (Comparative Analysis of Central Tendency of Intensity for Digital Mammogram Registration) and Chapter 9 (A Novel Edge Detection Algorithm for Digital Mammogram) into a single Chapter 6 (Digital Mammogram Registration and Edge Detection)
- Merging of Chapter 8 (Isolation and Suppression of Pectoral Muscle in Digital Mammogram) and Chapter 11 (An alternative approach to detection and isolation of Pectoral Muscle from Digital Mammogram) into a single Chapter 7 (Isolation and Suppression of Pectoral Muscle in Digital Mammogram).
- The second section (Background) has been merged with the first section (Introduction) for all the chapters of thesis to make it more concise.
- In Chapter 1 (Introduction) the section 1.12. (Critical Review of Research Scenario) has been removed. Two new sections are added. The section 1.11. (Structure of the Thesis) to provide a brief description of thesis and to incorporate the list of newly proposed algorithms developed by me and section 1.12. (Quantitative Analysis) to outline the various statistical methods used for experimental result analysis.
- A new section 4.6. (Discussion) added in Chapter 4 (Dataset).
- A new section 5.5. (Quantitative Analysis) added in Chapter 5 (Preparation of Digital Mammogram for CAD).
- A new section 6.5. (Quantitative Analysis) added in Chapter 6 (Digital Mammogram Registration and Edge Detection).
• A new section 7.6. (Quantitative Analysis) added in Chapter 7 (Isolation and Suppression of Pectoral Muscle in Digital Mammogram).

• A new section 8.5. (Quantitative Analysis) added in Chapter 8 (Accurate Breast Contour Detection Algorithms in Digital Mammogram).

• A new section 9.6. (Quantitative Analysis) added in Chapter 9 (Anatomical Segmentation to Differentiate Breast Regions of Digital Mammogram).

• A new section 10.5. (Quantitative Analysis) added in Chapter 10 (Identification of Abnormal Masses in Digital Mammogram).

• A new section 11.5. (Quantitative Analysis) added in Chapter 11 (Bilateral Breast Asymmetry Detection using Landmark based Registration and Intensity Histogram).

• A new section 12.5. (Quantitative Analysis) added in Chapter 12 (A Computerised Approach towards Three Dimensional Breast Volume Calculation).

• A new section 13.6. (Quantitative Analysis) added in Chapter 13 (Density Estimation and Classification using Progressive Elimination Method).

• A new section 14.2. (Histology of Breast Cancer) added in Chapter 14 (Introductory Approach towards Analysis of Histopathological Biopsy Slide of Breast Cancer).

• The last Chapter 15 (Summary) a new table (Table: 15.1.) is added to section 15.1. (Contribution) demonstrating the summary of algorithmic accuracy.