Medical Image Processing Projects assist diagnosis in different medical conditions. Medical Image Processing helps to diagnose, treat and cure patients without causing any harmful side effects. Help us to learn more about neurology and human behaviors. Medical Image Processing projects create visual representations of the interior of a body for clinical analysis and medical intervention. Lots of techniques that can be used as non-invasive methods of looking inside the body is studied with help of medical image processing.

We assist research Scholars in implementing **Medical Image Processing Projects** with best Customer Support. For details contact us: +91 9790238391.

Needs & Uses:

- Medical images are used to create and implement medical thesis. Thesis topics of human organs are lung, brain, tongue, kidney, skull, retina.

- Several soft computing algorithms are used to done the processes of image segmentation and image classification.

Types of Medical Image Modalities:

➢ PET/ SPECT.

➢ MRI.

➢ Ultrasound.

➢ Computer Tomography.

➢ X-Rays.

Software requirement in medical image processing projects:

- ➢ Matlab.

- ➢ Scilab.

- ➢ ImageJ.

- ➢ OpenCV.

Requirements:

- **Operating System: Windows OS, MAC OS and Linux**

- **Additional Tools:**

  - ➢ Visualization Toolkit.

  - ➢ ITK.

  - ➢ SPM.

  - ➢ 3D Slicer.

  - ➢ MIA.

  - ➢ NiftReg.

  - ➢ ITK SNAP.

  - ➢ MITK.

  - ➢ Elastic.

  - ➢ ANTS.

  - ➢ NiftSeg.

  - ➢ 3DSeg.

Sample Medical Image Processing Projects Topics.

SI	IEEE Medical Image Processing Projects Titles.
1	Super resolution techniques for medical image processing.
2	ConformalALU: A Conformal Geometric Algebra Coprocessor for Medical Image Processing.
3	Contrast enhancement and smoothing of CT images for diagnosis.
4	Computer-aided detection of brain tumors using image processing techniques.
5	A modern perception for optical diagnosis using simulation techniques.
6	Expiration-Phase Template-Based Motion Correction of Free-Breathing Abdominal Dynamic Contrast Enhanced MRI.
7	K3. A region growing liver segmentation method with advanced morphological enhancement.
8	Computer Aided Detection of age related macular degeneration in retinal images.
9	Improving visual quality in wireless capsule endoscopy images with contrast-limited adaptive histogram equalization.
10	Automatically density based breast segmentation for mammograms by using dynamic K-means algorithm and Seed Based Region Growing.
11	P3333.2.1/D1, May 2014 - IEEE Recommended Practice for Three-Dimensional (3D) Medical Modeling.
12	Fast X-Ray CT Image Reconstruction Using a Linearized Augmented Lagrangian Method With Ordered Subsets.
13	Automatic acne detection for medical treatment.
14	Vertebral body segmentation using a probabilistic and universal shape model.
15	Using Image Processing on MRI Scans.
16	A Linear Chain Markov Model for Detection and Localization of Cells in Early Stage Embryo Development.
17	A Reconstruction-Classification Method for Multifrequency Electrical Impedance Tomography.
18	A Sticky Weighted Regression Model for Time-Varying Resting-State Brain Connectivity Estimation.
19	A useful approach towards 3D representation of brain abnormality from its 2D MRI slides with a volumetric exclamation.
20	Multiple Hypotheses Image Segmentation and Classification With Application to Dietary Assessment.
21	Two-Phase Greedy Pursuit Algorithm for Automatic Detection and Characterization of Transient Calcium Signaling.
22	Novel hybrid hardware architecture for nuclei detection in skin histopathological images.
23	3D Microendoscopic Electrical Impedance Tomography for Margin Assessment During Robot-Assisted Laparoscopic Prostatectomy.
24	Motion Estimation in Cardiac Fluorescence Imaging With Scale-Space Landmarks and Optical Flow: A Comparative Study.

25	Multi-Modal Intra-Operative Navigation During Distal Locking of Intramedullary Nails.
26	Rotation invariant detection of benign and malignant masses using PHT.
27	Segmentation and detection of Squamous cell lung malignanncy from sputum images.
28	Cardiac Fiber Unfolding by Semidefinite Programming.
29	Glaucoma detection from retinal images.
30	A low power, parallel wearable multi-sensor system for human activity evaluation.
31	An Effective Post-Filtering Framework for 3-D PET Image Denoising Based on Noise and Sensitivity Characteristics.
32	Deformation Corrected Compressed Sensing (DC-CS): A Novel Framework for Accelerated Dynamic MRI.
33	Optimized Excitation Mode for Generalized Back Projection Algorithm in 3-D EIT.
34	1D-3D Registration for Intra-Operative Nuclear Imaging in Radio-Guided Surgery.
35	Evaluation of algorithms for segmentation of retinal blood vessels.
36	On the Opportunities and Challenges in Microwave Medical Sensing and Imaging.
37	Supervised Multi-View Canonical Correlation Analysis (sMVCCA): Integrating Histologic and Proteomic Features for Predicting Recurrent Prostate Cancer.
38	Visual information retrieval techniques applied to veterinary radiology.
39	An approach to study the range of perturbations in Exact Algorithm on microwave tomography of biological targets with different beam width.
40	Optimized approach of sobel edge detection technique using Xilinx system generator.
41	Reconstruction of 4-D Dynamic SPECT Images From Inconsistent Projections Using a Spline Initialized FADS Algorithm (SIFADS).
42	Automatic Brain Morphometry and Volumetry Using SPM on Cognitively Impaired Patients.
43	A Model-Based Pharmacokinetics Characterization Method of Engineered Nanoparticles for Pilot Studies.
44	A New Method to Measure Directional Modulation Transfer Function Using Sphere Phantoms in a Cone Beam Computed Tomography System.
45	A Pneumatically Actuated Target Stabilization Device for MRI-Guided Breast Biopsy.
46	Lumen Segmentation and Motion Estimation in B-Mode and Contrast-Enhanced Ultrasound Images of the Carotid Artery in Patients With Atherosclerotic Plaque.
47	A spatial fuzzy C-means algorithm with application to MRI image segmentation.
48	Performance analysis of various methods of tumour detection.
49	Microwave Medical Imaging Based on Sparsity and an Iterative Method With Adaptive Thresholding.
50	Framework for detection of cataract and gradation according to its severity.