
Departmental Seminar

Seminar Title	: HAMMF: A Hybrid Adaptive Modified Median Filter for Denoising Mammogram
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Venue	: New Conference Hall CS323, CSE Department
Date and Time	: 04 Mar 2025 (11:00 AM)
Abstract	: Mammography is crucial for detecting breast cancer, but noise can hinder accurate interpretation. This paper proposes a two-stage hybrid de-noising algorithm for digital mammograms. First, the Adaptive Modified Median Filter (AMMF) removes noise, and then a Guided Filter preserves edges and details. Experiments on the MIAS dataset show the filter effectively removes salt-and-pepper noise. Performance is evaluated using metrics like Mean Square Error, PSNR, and Structural Similarity Index, comparing it to other filters like Median, Adaptive Median, Hybrid Median, Bilateral, and Guided filters. The proposed method effectively suppresses noise, preserves edges, and improves visual quality and PSNR.