Department Name: Electrical Engineering

## Faculty Name: Dr. Amrita Ganguly

Designation: Associate Professor

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## **Educational Qualification & Experience**

1. B.E (Electrical Engineering) - 1992, Gauhati University- 1st Class

- 2. M.E (Electrical Engineering) 2001, Jadavpur University, Kolkata
- 3. Ph.D (Electronics and Electrical Engineering): IIT Guwahati, 2012

Experience:

Worked in Wipro Infotech Limited during 1992-1994

Working as a faculty member in Electrical Engineering since 1994.

## **Research Interest**

- 1. Image and Video Processing
- 2. Signal Processing and Systems
- 3. Microprocessors and Applications

## **Recent Publications**

- Improved Mode Decision Algorithm Based on Residues and Early Zero Block Detection in H.264/AVC,
  A.Ganguly and A.Mahanta, Journal of Signal, Image and Video Processing. Online in February, 2012 ©
  Springer- Verlog London Ltd. Doi:10.1007/S11760-012-021-7
- New Fast Mode Decision Algorithm for Intra Only Spatial Scalable Video Coding, , A.Ganguly and A.Mahanta, International Journal of Recent Trends in Engineering and Technology, 2010, Academy Publishers, Finland.
- Weight Based Fast Mode Decision for H.264/AVC Video Coding Standard, **A.Ganguly** and A.Mahanta, Accepted for publication in LNCS, 2012 © Springer- Verlog London Ltd.
- Fast Mode Decision Algorithm for H.264/AVC Intra Prediction, A.Ganguly and A.Mahanta, IEEE TENCON 2009, Singapore.

- A Subband/DCT based Fast Mode Decision Algorithm for H.264, A.Ganguly and A.Mahanta, IEEE TENCON 2009, Singapore.
- Fast Mode Decision Algorithm for Intra only Scalable Video Coding using combined Subband /DCT Coding, A.Ganguly and A.Mahanta, Proceedings of 2009 International Conference on Software Technology and Engineering, Chennai.
- Fast Intra Prediction Algorithm in the Transform Domain for H.264/AVC, **A.Ganguly** and A.Mahanta, Proceedings of IEEE Int. Conf. on Advances on Communication Network and Computing, 2010, Calicut.
- Fast Mode Decision Algorithm for H.264/AVC using Edge Characteristics of Residue Images, A.Ganguly and A.Mahanta, Proceedings of Seventh Indian Conference on Computer Vision, Graphics and Image Processing, 2010, Chennai.
- Improved Inter Mode Decision for H.264/AVC Using Weighted Prediction, **A.Ganguly** and A.Mahanta, Proceedings of International Conference on Signal Processing and Multimedia Applications, 2011, Spain.
- A Subband/DCT based Image Watermarking Algorithm, A.Sarma and A.Ganguly, IEEE Proceedings on National Conference on Emerging Trends and Applications in Computer Science 2012.
- A Combined DCT/DWT based Image Watermarking Algorithm, A.Sarma and **A.Ganguly**, Proceedings on International Conference on Electronics and Communications Engineering 2012.