

# Srimanta MANDAL

## PERSONAL DATA

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DATE OF BIRTH: 02-Oct-1987  
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GOOGLE SCHOLAR: <https://scholar.google.co.in/citations?user=spX3QwcAAAAJ&hl=en>

## EDUCATION

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2010 – PRESENT    Ph.D. in IMAGE PROCESSING  
                          *School of Computing and Electrical Engineering*  
                          **Indian Institute of Technology Mandi**, HP, India  
                          CGPA: 9/10 | Topic: Image Super-resolution  
                          Thesis: “**NOVEL APPROACHES FOR SUPER RESOLUTION OF**  
                          **INTENSITY/RANGE IMAGE USING SPARSE REPRESENTATION**”  
                          Supervisor: Dr. Anil K. SAO

JULY 2010    Bachelor of Technology in ELECTRONICS & COMMUNICATION ENGINEERING  
                          *Asansol Engineering College,*  
                          **West Bengal University of Technology**, WB, India  
                          CGPA: 8.38/10

## RESEARCH INTERESTS

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Computer vision and image processing, Pattern Recognition

## EXPERIENCE

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2010-2016    Teaching Assistant at INDIAN INSTITUTE OF TECHNOLOGY MANDI, HP, India  
(During Ph.D.)    *Major Subjects: Digital Image Processing, Digital Signal Processing, Signals & Systems, Computer Organization, Control Systems*  
                          Responsibilities: Conducting tutorials, Evaluating assignments, Conducting laboratories, Coordinating examinations, Maintaining records of students

SUMMER 2012    Summer Intern at SAMSUNG R&D INSTITUTE, Noida, India  
                          *Project: Video Scale-up Enhancement.*  
                          Received pre-placement offer from Samsung as a result of very positive review.

## COMPUTER SKILLS

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Languages:    MATLAB, OCTAVE, Basics of ASSEMBLY LANGUAGE using NASM  
Environment:    WINDOWS, UBUNTU  
Other Software:    PSPICE,  $\text{\LaTeX}$ , Visio, Excel, Word, PowerPoint

## LANGUAGES

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BENGALI:    Mother-tongue  
ENGLISH:    Fluent  
HINDI:    Basic Knowledge

## PUBLICATIONS IN JOURNAL

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- S. Mandal, A. Bhavsar and A. K. Sao, "Depth Map Restoration from Under-sampled Data," *IEEE Transactions on Image Processing*, vol. 26, no. 1, pp. 119-134, Jan. 2017.
- S. Mandal, A. Bhavsar and A. K. Sao, "Noise Adaptive Super-Resolution from Single Image via Non-Local Mean and Sparse Representation," *Signal Processing*, vol. 132, pp. 134-149, Mar. 2017.
- S. Mandal and A. K. Sao, "Employing structural and statistical information to learn dictionary(s) for single image super-resolution in sparse domain," *Signal Processing: Image Communication*, vol. 48, pp. 63-80, Oct. 2016.
- S. Mandal, S. Thavalengal, and A. K. Sao, "Explicit and implicit employment of edge-related information in super-resolving distant faces for recognition," *Pattern Analysis and Applications*, vol. 19, no. 3, pp. 867-884, Aug. 2016.

## PUBLICATIONS IN CONFERENCES

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- S. Mandal, S. Kumari, A. Bhavsar, and A. K. Sao, "Multi-Scale Image Denoising While Preserving Edges in Sparse Domain," in *Proceedings of the European Workshop on Visual Information Processing (EUVIP)*, Oct. 2016.
- S. Mandal, A. Bhavsar, and A. K. Sao, "Super-resolving a single intensity/range image via non-local means and sparse representation," in *Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP)*, Dec. 2014, pp. 1-8.
- S. Mandal, A. Bhavsar, and A. K. Sao, "Hierarchical example-based range-image super-resolution with edge-preservation," in *IEEE International Conference on Image Processing (ICIP)*, Oct. 2014, pp. 3867-3871.
- S. Thavalengal, S. Mandal and A. K. Sao, "Significance of Dictionary for Sparse Coding Based Pose Invariant Face Recognition," in *Proceedings of the Twentieth National Conference on Communications (NCC)*, Feb. 2014, pp. 1-5.
- S. Mandal and A. K. Sao, "Image De-blurring in Super Resolution Framework," in *Proceedings of the National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG)*, Dec. 2013, pp. 1-4.
- S. Mandal and A. K. Sao, "Edge preserving single image super resolution in sparse environment," in *20<sup>th</sup> IEEE International Conference on Image Processing (ICIP)*, Sept. 2013, pp. 967-971.

## ACHIEVEMENT

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- Travel grant from Indian Institute of Technology Mandi, for presenting at International Conference on Image Processing 2014, Paris, France.

## PROFESSIONAL ACTIVITIES

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- Served as a reviewer for various journals and conferences including  
**Journals:** IEEE Signal Processing Letter, Neurocomputing (Elsevier).  
**Conferences:** International Conference on Signal Processing and Communications (SPCOM-2014), Workshop on Signal Processing, Image Processing and Pattern Recognition (SIPR-2015).
- IEEE Graduate Student Member in Delhi Section of Asia and Pacific Region.

## INVITED TALKS

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JANUARY 2014	“IMAGE SUPER-RESOLUTION: AN OVERVIEW” <i>MCKV Institute of Engineering (in association with IEEE Kolakta section),</i> Kolkata, India.
DECEMBER 2013	“A GLIMPSE OF DIGITAL IMAGE PROCESSING” <i>Bells Institute of Management &amp; Technology, Shimla, India.</i>

## REFERENCES

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References can be provided on request.