Dr. Udhav Bhosle, Ph.D. (IIT Bombay)
Flat No. A203, Arshie Complex CHS Ltd, Panch Marg,
Off Yari Road, Versova, Andheri (W), Mumbai-400 061

Email: udhavbhosle@gmail.com Cell:+91-09820123888
Phone:+91 22-65759706

Name in Full	:	**Dr. UDHAV VENKATRAO BHOSLE**
Present employment	:	Principal and Director, MCT's Rajiv Gandhi Institute of Technology, Mumbai Juhu-Versova Link Road, Versova, Andheri (W), Mumbai (M.S.), PIN-400053 **Phone**: (O) 022-26707027 / 26714045 **Fax**: 022-26707026 **Email**: udhav.bhosle@mctrigt.ac.in **Web**: www.mctrgit.ac.in
Date of Birth	:	January 24, 1967
Nationality	:	Indian

Career Highlights

- Held many leadership positions over **career span of 22 years**, currently working as **the Principal of Rajiv Gandhi Institute of Technology, Mumbai.**
- Teaching Experience spanning **22 years** with a **PhD from IIT Bombay,** with a thesis titled *"Investigations in Image Mosaicing under different Problem Definitions"*
- **Director (Technical), Vilasrao Deshmukh Foundation and Manjara Charitable Trust, Latur from Jan 2009 to September, 2010.**
- **Vice President (Technical), Vilasrao Deshmukh Foundation, Latur, Maharashtra, since October 2010.**
- **Published more than 40 papers,** delivered number of technical talks.
- Member Board of Studies in Electrical Engineering, University of Mumbai. From September 2005 to September 2010.
- Worked as **Consultant for IIP (Indian Intellectual Property)** Services, USA from July 2004 to August 2008.
- Involved in **key Research & Development Projects.**
- Involved in conducting all India Examinations like GATE, JEE, ISAT and ICRB as a Presiding Officer.

Teaching Experience 22 years

Name of Institute	Period	Designation
MCT's Rajiv Gandhi Institute of Technology, Mumbai	From 31st May 2007 onwards	**Principal** & Professor of Computer Science
Ramrao Adik Institute of Technology, Navi Mumbai	December 2005 to May 2007	**Principal** & Professor of Electronics Engineering
M.G.M. College of Engineering and Technology, Mumbai	July 2002 to November 2005	Professor and **Head of Department**, Electronics and Telecommunication
M.G.M. College of Engineering and Technology, Mumbai	October 1997 to July 2002	Assistant Professor, Department of Electronics and Telecommunication

M. G. M. College Engineering and Technology, Nanded	July 1990 to September 1997	Lecturer, Department of Electronics and Telecommunication

Educational Background

Name of Course	Name of Institute	Year	Grades
Ph.D. (Electrical Engineering)	Indian Institute of Technology, Bombay **(IIT Bombay)**	2004	-
M.E. (Communication Engineering)	S. G. G. S. Institute of Engineering and Technology, Nanded	1995	62% (First Class)
B.E. (Electronics Engineering)	S. G. G. S. Institute of Engineering and Technology, Nanded	1989	62% (First Class)
Std 12 (HSC)	Maharashtra State Board of Secondary and Higher Secondary, Aurangabad	1984	74%, PCM 97% (First Class)
Std 10 (SSC)	Maharashtra State Board of Secondary and Higher Secondary, Aurangabad	1982	84% (Distinction)

Membership of Professional Institutes or societies

- Life Member of Indian Society for Technical Education (LMISTE), New Delhi (No. LM15692)
- Fellow, Institution of Electronics and Tele-communication Engineer (FIETE), New Delhi (No.F156349)
- Member Institution of Electronics and Electrical Engineer (IEEE), No. 9076751
- Member Society for Automotive Engineer.

Current Areas of interest and Research

Area of Interest	:	Signal and System, Signal & Image Processing
	:	Statistical Theory of Communication
	:	Adaptive Signal Processing Computer Vision And Pattern Recognition
Area of Research	:	Adaptive Signal Processing, Satellite Image Processing, Computer Vision and Pattern Recognition
Post Graduate/Ph.D. Thesis Guided	:	Ph.D. submitted - 02 Ongoing – 02 M.Tech. completed - 10

Research & Development Projects

- Dr. S. Sengupta, Principal Investigator & **Dr. Udhav Bhosle**, Co-principal Investigator, "Modernization of Communication System", Under MODROB scheme AICTE, June 2001 to August 2004.
- **Dr. Udhav Bhosle**, Principal Investigator, "Multispectral Image Registration and Fusion", Under Research Promotion Scheme (RPS), of AICTE, April 2007.
- **Dr. Udhav Bhosle**, Principal Investigator, Consultancy Project of Navi Mumbai Municipal Corporation for Recruitment drives of NMMT staff.

Publications : Journals

- **Udhav Bhosle**, Subhasis Chaudhury and Sumantra Dutta Roy, ***"A Fast method for Image Mosaicing using Geometric Hashing Technique"***, IETE Journal of Research, Special Issue on Multimedia Signal Processing, May-June 2002, pages 317-328.
- **Udhav Bhosle**, Sumatra Dutta Roy and Subhasis Chaudhury, "Multispectral Panoramic Mosaicing", Publications in IEEE Journal of Pattern Recognition letters, vol. 26, no. 4, March 2005, pages 471-482.
- Seema Gore Biday and **Udhav Bhosle**, "Relative Radiometric Correction of Multitemporal Cloudy Satellite Images", In. Proceedings of World Academy Of Science, Engineering And Technology. Vol 39 March 2009 Issue 2070-3740, Pages 254-258.
- Manjusha Deshmukh and **Udhav Bhosle**, "Multisensor Image Fusion Techniques and Evaluation of Fused Image", International Journal of Computer Sciences, Software Engineering and Electrical Communication Engineering 1(1) 2009, Pages 91-97.
- Manjusha Deshmukh and **Udhav Bhosle**, "Image Fusion and Image Quality Assessment of Fused Images" International Journal of Image Processing (IJIP), volume (4): Issue (5) Pages 484-508.August 2010.
- Manjusha Deshmukh and **Udhav Bhosle**, "To Explore Radon Transform For Image Registration and Image Fusion" International Journal of Emerging Technologies and Applications in Engg, Technology and Sciences" ISSN: 0974-3588, Volume 3, Issue 1, Jan '10-July'10, Pages 376-382.
- Manjusha Deshmukh and **Udhav Bhosle**, "Radon and Fourier Transform Approach for Image matching and It's Application to Image Fusion" International journal of Computer Sciences, Software Engineering & Electrical Communication Engineering, Jan-June 2011 issue.
- Seema Gore Biday and **Udhav Bhosle** (2010). Relative Radiometric Correction of Multitemporal Satellite Images. *Journal of Computer Science*. Vol9, No. 6, pp. 940-949, ISSN 1549-3636 2010 Science Publications.
- Seema Gore Biday and **Udhav Bhosle** (2010). Relative Radiometric Correction of Cloudy Multitemporal Satellite Imagery. *International Journal of Civil and Environmental Engineering* 2:3 pp. 138-142.105
- Seema Gore Biday and **Udhav Bhosle** (2010). Change Detection in Satellite Images using Radon Transform. *Journal of Advances in Science and Technology*. Vol 13, No. 1, pp.175-181 ISSN 0971-9563.
- Seema Gore Biday and **Udhav Bhosle**. Relative Radiometric Correction of Multitemporal Satellite Imagery using Fourier and Wavelet transform. Accepted for Publication in *Journal of Indian Society of Remote Sensing*, Springer Publications.
- Seema Bidhe and **Udhav Bhosle**, "Relative Radiometric Correction of Multitemporal Satellite Imagery using Fourier and Wavelet Transform", communicated to International Journal of Photogrammetric and Remote Sensing (ISSPRS).
- **Udhav Bhosle** and Seema Bidhe, "Wavelet Approach to Relative Radiometric Correction of Multitemporal Satellite Imagery", Communicated to International Journal of Remote Sensing.

Publications : International Conferences

- **Udhav Bhosle**, Sumantra Dutta Roy & Subhasis Chaudhury, *"Multispectral Panoramic Mosaicing"*, In proceedings International Conference on Advances in Pattern Recognition, Indian Statistical Institute Kolkata, Dec2003, Pages 188-191.
- **Udhav Bhosle**, Subhasis Chaudhury and Santosh Gavali, *"Super-Mosaicing: Mosaicing at High Resolution",* in proceedings International Conference on Communication, Indian Institute of Science, Bangalore, 2004, pages 106-110.
- Anil Kale and **Udhav Bhosle,** "A Push System for Information Rendering Service on Mobile Handset and Email", In Proceedings International Conference on Advances in Manufacturing and Technology Management (ICAMTM 2007) Mumbai, India, January 2007, Pages 362-366.
- Manjusha Deshmukh and **Udhav Bhosle**, "Analysis and Imaging of Brain: Neural Pathways for Memory Task", In Proceedings International Conference on Advances in Manufacturing& Technology Management (ICAMTM 2007), Mumbai, India, January 2007, Pages 16-21.
- Manjusha Deshmukh and **Udhav Bhosle**, "Neural Pathways Involved in Analysis and Processing of Abstract and Concrete Words", In Proceedings National Conference on Application of Digital Signal Processing (NCDSP 2007), Mumbai, January 2007, Pages 157-162. Poster Presentation in International Conference on Advances in Manufacturing & Technology Management.
- Priti Tyagi and **Udhav Bhosle**, "Wavelet Based Image Registration and Its Application to Image Mosaicing", In Proceedings International Conference on Advances in Manufacturing & Technology Management (ICAMTM 2007), Mumbai, India, January 2007, pages 685-690.
- Bhavesh Parmar and **Udhav Bhosle**, "Statistical State Space Model for Estimation and Tracking of Cardiovascular Parameter", proceedings 15th International European Signal Processing Conference (EUSIPCO-2007), Poznami, Poland, September 2007, pages 27-33.
- Deelip Khairnar**, Udhav Bhosle**, S.N. Merchant & U.B. Desai, "A Neural Solution for Signal Detection in Non-Gaussian Noise", In the Proceedings of 4th International Conference on Information Technology: New Generation (ITNG07), Las Vegas, USA. April 2007. (Proceedings published by IEEE computer society).
- Sujata Pudale and **Udhav Bhosle**, "Survey of Radiometric Normalization Techniques for Resourcesat1 LISS III Images", Selected for presentation at International Conference on Computational Intelligence& Multimedia Applications (ICCIMA07), Shivkashi, Tamilnadu (Proceedings published by IEEE Computer Society).
- Sujata Pudale and **Udhav Bhosle,** "Multivariate Regression Method for Radiometric Correction of High Resolution Satellite Data", proceedings International Conference on Signal Processing, Communication, Instrumentation and Control, Vishwakarma Institute of Technology, Pune, India, Jan 2008, pages 125-130.
- Manjusha Deshmukh & **Udhav Bhosle**, "Comparative Study of Image Registration Techniques in Single and Multispectral Band", In Proceedings International Conference on Sensors, Signal Processing, Control and Instrumentation (SSPCCIN 07), Vishwakarma Institute of Technology, Pune, India, January 2008, pages 325-329.
- Poonam Jadhav, **Udhav Bhosle** and B. Lande, "Hirechircal Approach for Image Registration**:** Best Choice for Image Registration", International Conference on Image Processing and Pattern Recognition (ICICPR)", Las Vegas, Nevada, USA, July 2008, pages 564-569.
- Seema Bidhe, Jyoti Deshmukh and **Udhav Bhosle**, "Relative Radiometric Correction of Satellite Images using Polynomial Regression", in proceedings 3rd International Conference on Advance Computing and Communication Technologies (ICACCT08), Panipath, India, November 2008, pages 105-109.
- Manjusha Deshmukh and **Udhav Bhosle,** "Mutual Information Based Image Registration", in International Conference on Machine Vision, Image Processing and Pattern Analysis (MVIPPA 2008), World Academy of Science, Engineering and Technology, Bangkok, Thailand, Dec 2008.
- **Manjusha Deshmukh** and **Udhav Bhosle**, "Image Registration in Time and Frequency Domain", In Proceedings of International Conference on Machine Vision, Image Processing

and Pattern Analysis(MVIPPA 2008), World Academy of Science, Engineering and Technology, Bangkok, Thailand, Dec 2008.

- Priti Tyagi & **Udhav Bhosle**, "Image Based Atmospheric Correction of Remotely Sensed Images", In Proceedings of International Conference on Computer Applications &Industrial Applications (ICCAIE2010), Institution of Electrical and Electronics(IEEE) Malasyia, Dec 2010, Kuala Lumpur, Malasyia, Pages 56 -61.
- Manjusha Deshmukh and **Udhav Bhosle**, "Image Registration for Image Fusion" In Proceedings International Conference on Emerging Technologies and Applications in Engineering, Technology (ICETAETS 2008), Rajkot, Gujarat, January 2008, pages 1856-1860.
- Manjusha Deshmukh and **Udhav Bhosle**, "Mutual Information Based Image Registration", In Proceedings of International Conference on Signal Processing, World Academy of Science and Technology, Bangkok, December 2009 pages 113-118.
- Manjusha Deshmukh and **Udhav Bhosle**, "Image Registration in Time and Frequency Domain", In Proceedings of International Conference on Signal Processing, World academy of Science and Technology December 2009, pages 121-127.

Publications : National Conferences

- **Udhav Bhosle**, Subhasis Chaudhury and Sumantra Dutta Roy, *"Use of Geometric Hashing Technique for Automatic Image Mosaicing"*, National Conference on Communication (NCC01), Indian Institute of Technology Bombay, Mumbai, 2001, pages 533-537.
- **Udhav Bhosle**, Subhasis Chaudhury and Sumantra Dutta Roy, "Mosaicing of Scene with Moving Objects", in proceedings National Conference on communication (NCC02), Indian Institute of Technology, Madras, 2003, pages 80-85.
- Shivaji Ghungrad, **Udhav Bhosle** and S. Naquvi, "Simulation of Electrical Impendence Topography", Golden Jubilee DAE_BARC, in proceedings National Symposium on Nuclear Instrumentation (NSNI-2004), 2004, pages 167-171.
- **Udhav Bhosle** and Subhasis Chaudhary, "Investigations in Image Mosaicing Under Different Problem Definitions", Invited Talk, In Proceedings, National Conference on Signal Processing, Communication and Control, VIT, Pune, July 2005, Pages 353-361.
- Deelip Khairnar and **Udhav Bhosle**, "Moving Target Indicator Using Back Propagation Neural Network", In Proceedings National Conference on Unmanned Ground Vehicle, Vehicle Research and Development Establishment (VRDE), Defense Research and Development organization (DRDO), Ahmednagar, February 2006.
- **Udhav Bhosle** and Deelip Khairnar, "Signal Detection in Non Gaussian Noise using RBF Neural Network", In Proceedings Technical Symposium at Government College of Engineering (TSYGECA06), January 2006, Pages 325-329.
- Seema Gore Biday and **Udhav Bhosle**, "Relative Radiometric Correction Of Multitemporal Cloudy Satellite Images", In. Proceedings Of Indian Conference On Computer Vision, Graphics, Video And Image Processing (ICCVGIVP), Nagpur, India, March 2009, Pages 146-149.
- Seema Gore Biday and **Udhav Bhosle**, "A Study Of Change Detection Using Radon Transform", In. Proceedings Of National Conference On Natural Resource Management For Sustainable Development (NRMSD-2010), Jalgaon, India, 1-2 February 2010, Page 63.
- Seema Gore Biday and Udhav Bhosle (December 2010). Change Detection in Satellite Images using Radon Transform. *In Symposium of National Conference on GIS and Remote Sensing in Infrastructure Development* held at Lonavala, India, pp. 54,organized by Indian Society of Remote Sensing.
- **Udhav Bhosle**, Kingalkumar Patel and D. Vinod, "Home Automation and Security System Using Power Line Carrier Communication", In Proceedings National Conference on Signal Processing, Control and Communication", VIT, Pune, July 2005, Pages 314 –317.

International Patent Applications

- Rajendra Kumar Khare, Brajabandha Mishra, Manoj, **Udhav Bhosle**, B. Rao and Douglas Goldhush, "Video Karaoke System", Submitted to United states Patents by Broadcom India Pvt. Ltd., Bangalore, India.
- Rajendra Kumar Khare, Brajabandha Mishra, Manoj , **Udhav Bhosle**, B. Rao and Douglas Goldhush, "Video Background Substractor System", Submitted to United states Patents by Broadcom India Pvt. Ltd., Bangalore, India.
- Rajendra Kumar Khare, Brajabandha Mishra, Manoj , **Udhav Bhosle** , B. Rao and Douglas Goldhush, "Additional Layer for Lighting Effect for Video Stream", Submitted to United states Patents by Broadcom India Pvt. Ltd., Bangalore, India.

Technical Talks & Presentations

- Technical talk at ISTE-AICTE short term course on, "Computer Vision and its Applications", at Dr. Babasahab Ambedkar Technological University, Lonare, Maharashtra, April 2003.
- Technical Talk at ISTE-AICTE short-term course on, "Advances in Image Processing and Multimedia applications", at Veermata Jijabai Technical Institute, Bombay. (University of Mumbai), July 2004.
- Technical Talk at ISTE-AICTE short-term course on, "Advance in Signal and Image Processing in Instrumentations", Vishvakarma Institute of Technology, Pune. (University of Pune), June 2003.
- Technical Talk at ISTE_AICTE short-term course on "Advances in signal Processing", At Pune Institute of Engineering and Technology (formerly Government College of Engineering), Pune. (University of Pune), April 2004.
- Technical Talk on, "Signals and Transform", at Fr. Angels College of Engineering and Technology, Vashi, Navi Mumbai. (University of Mumbai), Jan. 2005.
- Technical talk on "Signal and Transforms", at Bangalore and New Delhi for IIP Services, USA, August 2004.
- Technical Talk and demonstration, "Workshop on Signal Processing & its applications "for **IPS (Indian Police Services) Officers,** at Indian Institute of Technology, Bombay, Dec-2003.
- Poster presentation at **Industry Academic Meet 2003,** Indian Institute of Technology, Bombay.
- Technical Talk at AICTE-ISTE short-term course On DSP and its applications, titled, "Image Registration: Multimodal, Temporal and Multi view Image Registration and its Application", Sardar Patel College of Engineering, Mumbai, May 2005.
- Udhav Bhosle and Uttara Ranade, Technical Talk, "Motion Estimation and Mosaicing of Scene with Moving Objects", National Workshop on Digital Signal Processing and its Applications in Communication, Control and Biomedical Engineering, RAIT, July 2006.
- Technical Talk, "Image Registration and Its Applications", AICTE ISTE short term Course on Image Processing, SIES, Mumbai, December 2006.
- Invited technical Talk, "Comparative Study of Relative Radiometric Normalization Techniques for Resource sat 1LISS III Sensor Images", In Proceedings International Conference on Sensors, Signal processing, Control and Instrumentation (SSPCCIN 07), Vishwakarma Institute of Technology, Pune, India, January 2008, pages 29-34.
- Invited Talk, "Statistical Signal and Image Processing", AICTE ISTE short term Training Programme at Padmashri Vasant Dada Patil College of Engineering, Mumbai, September 2008.
- Invited Talk, "Introduction to Image Processing", "Supermosaicing: Mosaicing at High Resolution", "Multispectral Image Processing", Department of Computer Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, March 2009.

Leadership Positions Held

- **Convener,** National Workshop on Digital Signal Processing and Its Applications in Communication, Control and Biomedical, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai. 3rd to 7th July 2006.
- **General Chair,** National Conference on Advances in Mechanical Engineering (NCAME09) in association with **Bhaba Atomic Research Centre (BARC)**, Mumbai, Rajiv Gandhi Institute of Technology, Mumbai. 15th & 16th Jan. 2009.
- **Convener,** National Workshop on Advances in Signal Processing and Applications (NWASP_2011), MCT's Rajiv Gandhi Institute of Technology, Andheri(W), Mumbai from 19th Jan to 21st Jan 2011.
- **Presiding officer,** Joint Entrance Examination: IIT-JEE 2012, IIT-JEE 2011 and IIT-JEE 2010.
- **Presiding Officer,** Graduate Aptitude Test in Engineering: GATE-2012, GATE-2011 and GATE-2010.
- **Presiding Officer, ISAT2011** (Indian Institute of Space Science and Technology) and **ICRB 2011. I C R B, 2012.**
- **Presiding Officer, DRDO (**Defense Research and Development Organization: DRDO-2010, **I C R B, 2012.**

Extra-curricular & Social Welfare Activities

- Invited and offered the stage of Institute during Annual Festival for the students of Street Children School run by "ASHA KIRAN TRUST" Andheri (W), Mumbai.
- Organized "Yoga Pranayam Camp" in the campus of RGIT for Senior Citizens in the area March 2008 and July 2009.
- Organized "Blood Donation Camp", in the campus and supplied 200 plus bottles of blood to the March 2009, March 2010 and October 2011.
- Organized "Plantation Drive" in the Andheri (W) area planted on 150 trees in association with the local residents of Andheri (W), Mumbai.
- Organized in association with local residents a "Clean Up Drive" on 13th February 2009, Feb. 2010 and Feb. 2011. Thus drive got participation 500 people all around the area.
- A Workshop on "First Aid Training" was organized for the local residents & students of the institute in October 2009.

References

- Prof. **Subhasis Chaudhary**, Professor Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai, India.
- Dr. **P.S. Pachricha (IPS),** Formar Director General of Police, Maharashtra state, Mumbai.
- Prof**. S.N. Merchant**, Professor, Department of Electrical Engineering, Indian Institute of Technology, Bombay, India.
- Dr. **Sumantra Dutta Roy**, Associate Professor, Department of Electrical Engineering, Indian Institute of Technology, New Delhi, India.
- Mr. **Ashutosh Dumare (IPS)**, Deputy Inspector General of Police, Mumbai. India.
- Mr. **Sanjay Lathkar (IPS**), Deputy Inspector General of Police, ATS, Pune, Maharashtra.
- **Mr. Eaknath Dawale (IAS**), Secretary, Government of Maharashtra. Mumbai. (India)

Dr. Udhav V. Bhosle