

Manoj P. Patil

School of Computer Sciences
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📍 : “Manharsh”, Plot no. 18/A Gat no. 149/3, Snehal Colony, Jalgaon

Experience Details:

14+ Years (Regular), 20+ (Including C.H.B)

Research Details:

Ph.D.: June 2014

Publications: Journal Papers : 15 Book Chapters: 03 Conferences:23

Areas: Machine Learning, Digital Image Processing

Personal

Name: Manoj Pannalal Patil

Date of Birth: 07th August 1978

Nationality: Indian

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Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon
(M.S.)- 425001.

Address (Home) 🏠 : “Manharsh”, Plot no. 18/A,
Gat no. 149/3, Snehal Colony, Jalgaon (M.S.)- 425001.

Education

- **Ph.D. (Computer Science)**
June – 2014, North Maharashtra University, Jalgaon
- **S.E.T. (Computer Science and Application)**
December – 2003
- **M. Sc. (Computer Science)**
June- 2001, 64.10%, North Maharashtra University, Jalgaon

Experience

- **Since 14th October 2008** : **Assistant Professor**
12+ Years
School of Computer Science,
KBC North Maharashtra University, Jalgaon
- **04th July 2008 to 13th October 2008** : **System Analyst**
3 months and 10 days
UGC Computer Center,
School of Computer Science,
KBC North Maharashtra University, Jalgaon
- **July 2007 to December 2007** : **Lecturer (C.H.B.)**
6 months
Department of Computer Science,
KBC North Maharashtra University, Jalgaon
- **29th January 2005 to 31st March 2007** : **Lecturer (Xth Plan Post)**
02 years, 02 months and 3 days
Department of Computer Science,
KBC North Maharashtra University, Jalgaon
- **24th December 2004 to 28th January 2005** : **Lecturer (Contract Post)**
01 month and 04 days
Department of Computer Science,
KBC North Maharashtra University, Jalgaon
- **June 2001 to December 2004** : **Lecturer (C.H.B.)**
03 years and 06 months
Department of Computer Science,
KBC North Maharashtra University, Jalgaon

Area of Interest

Image Processing, Machine Learning and Algorithms

Doctoral work

Ph.D.: June -2014

Title: Using Machine Learning in Automatic Image Annotation for Content Management

Summary: Automatic image annotation refers to tagging of images automatically. If Annotation is carried out by understanding contents of images, human subjective annotation is avoided and annotation accuracy is improved. Automatic annotation steps viz. Segmentation, feature extraction, training using machine learning and tagging unlabeled image are carried out. Segmentation is carried out by extraction of edge for shapes and for color images using clustering, thresholding and region based approaches. Shape, color and texture based features are extracted. Machine learning techniques, Artificial Neural Networks, Rough sets, Decision trees and K-nearest neighbor are used for annotation. The Segmentation and Annotation is carried out on standard datasets berkeley segmentation dataset, MPEG7 Shape dataset, Corel Image dataset and Caltech 256 dataset.

Awards/Fellowships/prizes received

- Appreciation for contribution in Online Centralized M.Sc. Admission 2017 process at university foundation day celebration on 12th august 2017.
- Appreciation of Ph.D. Thesis in **Best Ph.D. Thesis** contest at International Conference on Rough Sets and Knowledge Technologies (ICRSKT-2014) by Indian Rough Set Society at JNTUH, Hyderabad, November 9-11, 2014.
- State level Avishkar 2012 (Second Prize)
- University level Avishkar 2013 (First Prize)
- University level Avishkar 2012 (Second Prize)
- University level Avishkar 2010 (Second Prize)
- University level Avishkar 2009 (Second Prize)

Publications

- Papers in National and International Journals: 15
- Papers in National and International Conference Proceedings: 23
- Papers presented in Conferences/Research Conventions: 23

Research Project

- Automated System for Detection of Sigatoka and Cucumber Mosaic on Banana Plant in Jalgaon Region (2020-2022), RGSTC, Govt. of Maharashtra [4.80 Lacks] (Ongoing)
- Development of Segmentation System for Image Understanding (2013-2013), VCRMS, KBCNMU, Jalgaon. [0.70 Lacks] (Completed)

Membership of Associations/Society

- Indian Science Congress Association (ISCA) [[Life member](#)]

Administrative/Co-curricular/Extra-curricular Experience

- **Member, NAAC Steering Committee**, KBC North Maharashtra University, Jalgaon.
- **Member, Academic Committee** at School of Computer Science (June 2018-till date).
- **Member of the B.O.S. (Computer Management)**, KBC North Maharashtra University, Jalgaon.
- **Coordinator, Examination Committee** at School of Computer Science (June 2011-May 2013). (School of Computer Science has taken Academic Flexibility since June 2009)
- **Member, Admission Committee** at School of Computer Science (June 2013- May 2015).
- **Member, Examination Committee** at School of Computer Science (June 2009- May 2011 and June 2015- May 2018).
- **Member of the B.O.S. for the course Diploma in Web graphics and Animation.**
- **Member, Board of Paper Setters and Examiners** for MCA and M.Sc. (Computer Science) courses in KBC North Maharashtra University, Jalgaon.
- **Invited member in the B.O.S. (Computer Science) for syllabi design.**
- Actively involved in **syllabus design** process conducted at School of Computer Sciences for M.C.A. and M.Sc. (CS & IT) courses under **academic flexibility**.
- **Designed and updating** syllabi for the **courses under academic flexibility** as well as special course **Current Computing Trends** covering recent mobile operating systems and developments in **smartphone developments**.
- **Technical Support** to Computer Center for development of Android App, Paperless-Cashless Convocation System, Annual report of affiliated colleges and schools, Hostel admission system, Avishkar, Yuvarang, Teachers information system etc.
- **Member, Statistical Data Cell** of the university. Developed formats and online software for collection of data and feedback from various stakeholders of the university.
- **Member, Committee for NIRF** proposal submission of KBC North Maharashtra University.
- **Member, Core implementation team of Integrated University Management System (IUMS).**
- **Placement Coordinator**, School of Computer Science (June 2015-May 2018).
- **Project officer for Central Assessment Program**, KBC North Maharashtra University, Jalgaon for November-2013 Examination and April-2017 Examination.
- **CAP officer for Central Assessment Program**, KBC North Maharashtra University, Jalgaon for April-2012 Examination.
- **Member, Committee for conduct of Ph.D. Entrance Test (PET) Examination** at KBC

North Maharashtra University, Jalgaon for the years 2010, 2011 and 2017.

- **Staff Coordinator** for the workshop on **National Network Security Championship (NNSC-2014)** at zonal center School of Computer Sciences, KBC North Maharashtra University, Jalgaon.
- **Member of selection committees** in the role of **subject expert**.
- **Convener**, National Workshop on Advances in Computing (NWAC-2015) organized by School of Computer Sciences, KBC North Maharashtra University, Jalgaon sponsored by UGC New Delhi, 1-3 March, 2015.
- **Co-Coordinator**, Programming Ability and Confidence Enhancement (PACE) 2018-19 and 2019-20, activity carried out to enrich programming ability and confidence of PG students of the school and UG students of the affiliated colleges.
- **Co-Coordinator**, Earn & Learn scheme under Cyber Awareness Literacy Cell by Quick Heal Foundation, Pune to spread Cyber Security Awareness among students (A.Y 2018-19 and 2019-20).
- **Coordinator**, IT-quiz ('Manthan'), activity to celebrate National Science Day at School of Computer Science, KBC NMU, Jalgaon, March 2017.
- **Organizing committee member** for the events carried by the University like **Avishkar, Convocation, Ashvamegh** etc. and Workshops/Conferences organized by the School.
- **Lectures** on Design and Analysis of Algorithm for **UGC NET/SET Coaching**.
- **Crash Course** on Data Structures at SSBT's College of Engg. & Tech., Bambhori, Jalgaon.
- **Expert** for **programming** contests, **paper presentations**.

Invited Talks at Conferences/Workshops/Seminars

- Webinar on "**Digital Image Processing**" organized by RCPET's RCP Arts, Commerce & Science College, Shirpur on 26th May 2020.
- "**Using google classroom for effective teaching**" at workshop on Use of ICT for Effective Teaching organized by School of Computer Sciences and IQAC, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon on 30 November 2019.
- "**Texture Analysis**" at State Level Seminar on Digital Image Processing organized by RCPET's Arts, Commerce and Science College, Shirpur on 2nd March 2019.
- "**Texture Analysis**" at National Conference on Recent Trends in Computer Science & Application (NCRTCSA - 2016) organized by KCES's IMR, Jalgaon on 22nd March 2016.
- "**Digital Image Processing**" in Faculty Development Program organized by RCPET's IMRD, Shirpur on 14th Feb, 2016.

Publications

Journal Publications: (15)

- 1) Husain H. Dawoodi, Manoj P. Patil, “Rainfall Prediction In North Maharashtra Region Using Support Vector Machine”, *Turkish Journal of Computer and Mathematics Education*, Vol. 12 No. 7, pp. 1501-1505, 2021, ISSN: 1309-4653.
- 2) Husain H. Dawoodi, **Manoj P. Patil**, “Predicting Precipitation Using K-Nearest Neighbor Algorithm for Jalgaon, Dhule and Nandurbar Districts”, *International Journal of Advanced Science and Technology*, Vol. 29 No. 8, pp. 5259-5264, 2020, ISSN: 2005-4238.
- 3) Pramod P. Ghogare, Ajay U. Surwade, **Manoj P. Patil**, “Effective E-mail Spam Filtering Using Origin Based Information”, *International Journal of Computer Science and Engineering*, Vol. 6 Issue. 11, pp. 359-362, Nov 2018, ISSN: 2347-2693.
- 4) Manisha S. Deshmukh, **Manoj P. Patil** and Satish R. Kolhe, “A Hybrid Text Line Segmentation Approach for the Ancient Handwritten Unconstrained Freestyle Modi Script Documents”, *The Imaging Science Journal, Taylor & Francis*, June 2018, ISSN :1368-2199.
- 5) Manisha S. Deshmukh, **Manoj P. Patil**, Satish R. Kolhe,” The Divide-and-Conquer Based Algorithm to Detect and Correct the Skew Angle in the Old Age Historical Handwritten Modi Lipi Documents”, *International Journal of Computer Science & Applications*, Vol. 14, No. 2, pp. 47-63, 2014 ISSN : 0972-9038.
- 6) Pramod P. Ghogare, **Manoj P. Patil**,” A Study of Security Awareness Among Android Users”, *International Journal of Computer Science & Engineering Technology (IJCSET)*, Vol. 8 No. 06, pp. 232-241, June 2017, ISSN: 2229-3345.
- 7) **Manoj P. Patil** and Satish R. Kolhe. “Automatic Image Annotation Using Decision Trees and Rough Sets”. *International Journal of Computer Science & Applications*, Vol. 11, No. 2,, pp. 38-49, 2014. ISSN : 0972-9038.
- 8) Ajay U. Surwade, **M.P.Patil** and S.R.Kolhe, “Empirical Analysis of Spam Classification using Machine Learning Techniques”, *International Journal of Applied Engineering Research*, Volume 9, Number 18, pp. 5057-5074, 2014. ISSN: 0973-4562.
- 9) **Manoj P. Patil** and Satish R. Kolhe. “Automatic Shape Annotation Using Rough Sets and Decision Trees”. *IJEIR* Volume 1, Issue 2, pp. 32 – 37, 2012. ISSN: 2277 – 5668.
- 10) **Patil M.P.** and Kolhe S.R., “Automatic Image Categorization and Annotation using K-NN for Corel Dataset”, *Advances in Computational Research*, Volume 4, Issue 1, pp.-108-112., 2012. ISSN: 0975-3273 & E-ISSN: 0975-9085.
- 11) **M.P.Patil**, S.R.Kolhe, “AUTOMATIC ANNOTATION OF 2D SHAPES USING HIERARCHICAL CLASSIFIER”, *International Journal of Emerging Technologies and Application in Engineering, Technology and Sciences* Volume (3) : Issue (2) pp. 403-408, July– December 2010. ISSN: 0974-3588.
- 12) **M.P.Patil**, S.R.Kolhe, “Automatic Tagging of 2D Shapes using Feedforward Neural Networks”, *International Journal of Computer Science and Application*, Issue (1) pp.58-

61, 2010. ISSN: 0974-0767.

- 13) S.R. Kolhe, V.R. Salkute, **M.P. Patil**, “Business Intelligence (BI) Tools and Techniques: Indian Scenario”, *Current Development in Artificial Intelligence* Volume 1, Number 1-3, pp. 21-28, 2010. ISSN 0976-5832.
- 14) **Manoj P. Patil**, Satish R. Kolhe, “Automatic Corel Image Categorization and Annotation using MLP and K-NN”, *VNSGU Journal of Science and Technology*, Volume (3): Issue (2) pp.44-52, March 2012. ISSN 0975-5446.
- 15) **Manoj P. Patil**, Satish R. Kolhe, “MPEG7 Shape Dataset Tagging using Feedforward Neural Networks”, *VNSGU Journal of Science and Technology*, Volume (2): Issue (1) pp.52-56, January– June 2010. ISSN 0975-5446.

Book/ Book Chapters Published: (03)

- 1) Sapkale S.S., **Patil M.P.** Texture Based Material Classification Using Gabor Filter. In: Santosh K.C., Gawali B. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2020. Communications in Computer and Information Science, vol 1380. Springer, Singapore, Chapter 6, pp 57-68, 2021, ISSN: 1865-0929, https://doi.org/10.1007/978-981-16-0507-9_6
- 2) Vandana V. Chaudhari, **Manoj P. Patil** Identification of Banana Disease Using Color and Texture Feature, Recent. In: Santosh K.C., Gawali B. (eds) Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2020. Communications in Computer and Information Science, vol 1381. Springer, Singapore, Chapter 21, pp 238-248, 2021, ISSN: 1865-0929, https://doi.org/10.1007/978-981-16-0493-5_21
- 3) Shubhangi S. Sapkale, **Manoj P. Patil**, “Material Classification Using Color and Texture Features” *Communications in Computer and Information Science*, vol 1035. Springer, Singapore, Chapter 5, pp 49-59, ISSN: 1865-0929, 2019, DOI: doi.org/10.1007/978-981-13-9181-1_5.

Papers in Conference Proceedings: (23)

International Conferences: (13)

- 1) V. V. Chaudhari, **M. P. Patil** , “Banana leaf disease recognition based on Local Binary Pattern” , Fifth International Conference on Smart Trends in Computing and Communications, Las Vegas, Nevada, United States during 15th - 16th April, 2021
- 2) Husain H. Dawoodi, **Manoj P. Patil**. “Rainfall Prediction in North Maharashtra Region using Support Vector Machine. International Conference on Advances in Intelligent Systems and Computing”, Chennai, 27-28, March 2021.
- 3) Pramod P. Ghogare, **Manoj P. Patil**, “Origin-Based Spam E-Mail Classification Using Machine Learning Algorithms”, in “International Conference on Innovations in Electronics, Communication, Computing & Automation (ICIECCA-2020)”, IETE Vijayawada chapter, 23rd to 25th November, 2020.

- 4) V. V. Chaudhari, **M. P. Patil**, “Banana leaf disease detection using K-means clustering and Feature extraction techniques” ,International Conference on Advances in Computing, Communication and Materials (ICACCM)-2020, Jointly organized by Uttarakhand Technical University and Tula's Institute, Dehradun, IEEE Technically Co-sponsored. pp. 126-130, DOI: 10.1109/ICACCM50413.2020.9212816
- 5) H H. Dawoodi, **M. P. Patil**, “Predicting Precipitation Using K-Nearest Neighbor Algorithm for Jalgaon, Dhule and Nandurbar Districts”, *International Conference on Recent Advancements in Technological Evolution-2020*, Maulana Mukhtar Ahmad Nadvi Technical Campus, Malegaon, 19-20 March 2020.
- 6) Pramod P. Ghogare, **Manoj P. Patil**, “Spam E-mail Classification Using Naive Bayes Algorithm”, *3rd Recent International Conference on Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2020*, Department of Computer Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 3-4 January 2020.
- 7) V. V. Chaudhari, **Manoj P. Patil**, “Identification of Banana Disease Using Color and Texture Feature”, *3rd Recent International Conference on Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2020*, Department of Computer Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 3-4 January 2020.
- 8) Shubhangi S. Sapkale, **Manoj P. Patil**, “Texture based material classification using gabor filter”, *3rd Recent International Conference on Recent Trends in Image Processing and Pattern Recognition. RTIP2R 2020*, Department of Computer Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, 3-4 January 2020.
- 9) **Manoj Patil**, Snehalata Shirude , Gajendra Wani , Manish Joshi (2019), “Programming Ability and Confidence Enhancement (PACE): A Peer Tutoring Model”, *International Conference on Capacity Building in Higher Education (Under the aegis of CABCI – A European Union Funded Initiative), ICBHE 2019*, September 5–6, 2019, Wroclaw University of Science Technology, Wroclaw, Poland.
- 10) Shubhangi S. Sapkale, **Manoj P. Patil**, “Material classification using color and Texture Feature”, *Recent Trends in Image Processing and Pattern Recognition 2018 (RTIP2R-2018)*, Department of Computer Sciences, Solapur University, Solapur, December 21-22, 2018.
- 11) Manisha S. Deshmukh, **Manoj P. Patil**, Satish R. Kolhe, “A Dynamic Statistical Nonparametric Cleaning and Enhancement System for Highly Degraded Ancient Handwritten Modi Lipi Documents”, *Fifth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2017)*, technically co-sponsored by IEEE Communications Society (ComSoc) pp. 1545-1551, 13-16 September 2017. (DOI: 10.1109/ICACCI.2017.8126061)
- 12) Ajay U Surwade, **M.P. Patil**, S.R. Kolhe, “Effective and adaptive technological solution to block spam E-mails”, IEEE International Conference on Advances in Human Machine Interaction (HMI) 2016, Organized by RLJIT, Doddaballapur, Bengaluru, Karnataka, India during March 3-5, 2016, pp. 1-10 (DOI:10.1109/HMI.2016.7449180)
- 13) Manisha S. Deshmukh, **Manoj P. Patil**, Satish R. Kolhe “Off-line Handwritten Modi Numerals Recognition using Chain Code” , *ACM Third International Symposium on Women in Computing and Informatics (WCI-2015)*, Organized by SCMS School Of

Engineering And Technology, Kochi, Kerala, India during August 10-13, 2015 pp. 388-393 (DOI: 10.1145/2791405.2791419)

National Conferences:(10)

- 1) Sweta G. Phegade, **M. P. Patil**, “Content Based Image Retrieval in Polyhouse – A Review”, “*National Conference in Advances in Computing*” organize by School of Computer Sciences, KBC North Maharashtra University, Jalgaon, pp.44-50, March 24-25, 2017, ISBN:978-81-910591-8-2.
- 2) M. S. Deshmukh, **M. P. Patil**, S. R. Kolhe, “Detection and Correction of Skew Angle in the Ancient Handwritten Modi Documents”, “*National Conference in Advances in Computing*” organize by School of Computer Sciences, KBC North Maharashtra University, Jalgaon, pp.27-33, March 24-25, 2017, ISBN:978-81-910591-8-2.
- 3) M. S. Deshmukh, **M. P. Patil**, S. R. Kolhe, “Skew Angle Correction for Handwritten Devnagari Characters using Horizontal and Vertical Projection Profile Techniques”, “*National Conference on Recent Trends in Computer Science & Application 2015*”, pp.44-49, Jan 27- 28,2015, ISBN:978-93-84093-76-1.
- 4) **M. P. Patil**, S. R. Kolhe, “Color Feature based Automatic Image Annotation and Retrieval Using Support Vector Machine”, “*National Conference in Advances in Computing*” organize by School of Computer Sciences, KBC North Maharashtra University, Jalgaon pp. 211-215, March 5-6, 2013, ISBN:978-81-910591-7-5.
- 5) M. S. Deshmukh, **M. P. Patil**, S. R. Kolhe, “Recognition of Modi Script Vowels using KNN” at “*National Conference in Advances in Computing*” organize by School of Computer Sciences, KBC North Maharashtra University, Jalgaon, pp.206-210, March 5-6 , 2013, ISBN:978-81-910591-7-5.
- 6) **Manoj P. Patil**, Satish R. Kolhe, “COMPARATIVE ANALYSIS OF SEGMENTATION TECHNIQUES” at “*National Conference on Current Trends in Software Developments*” organize by M.J.College, Jalgaon on February 08-09 , 2013.
- 7) **M. P. Patil**, S.R.Kolhe, “Automatic Shape Annotation Using k- Nearest Neighbor (k-NN) Technique” at “*Conference on Research Trends in Computer and Management*” organize by Institute of Management and Career Development, Bhusawal on January 8 , 2012. ISBN 987-93-81171-59-2
- 8) **M. P. Patil**, S. R. Kolhe, M. R. Joshi, “Tagging 2D Shapes using Neural Networks and Rough Sets” at “*National Conference on Emerging Trends in Soft Computing*” organized by Department of Computer Science, Nowrosjee Wadia College, Pune, February 1-2 , 2011. ISBN: 978-93-80697-56-7
- 9) **M.P.Patil**, S.R.Kolhe, “Tagging MPEG 7 Shape Dataset Using Connectionist Approach” at “*Emerging Trends in Engineering, Technology and Management*” organized by S. S. B. T.’s College of Engineering, Bambhori, Jalgaon (M.S.) March 29 , 2010.
- 10) **M. P. Patil**, S.R.Kolhe, “2D Shape Tagging using Feedforword Neural Networks” at “*National Conference on Emerging Trends in Computer science and Information Technology*” organized by J. T. Mahajan College of Engineering, Faizpur (M.S.)

March 4-5, 2010.

Papers Presented at Conferences/Conventions: (23)

National Conferences: (13)

- 1) Shubhangi S. Sapkale, **Manoj P. Patil**, “Material classification using color and Texture Features”, “*National Conference in Advances in Computing*”, School of Computer Sciences, KBC North Maharashtra University, Jalgaon, February 21, 2018.
- 2) Pramod P. Ghogare, **Manoj P. Patil**, “Effective Spam Filtering Using Origin Based Information”, “*National Conference in Advances in Computing*”, School of Computer Sciences, KBC North Maharashtra University, Jalgaon, February 21, 2018.
- 3) Vandana V. Chudhari, **Manoj P. Patil**, “Automated Identification of plant disease: A Survey”, “*National Conference in Advances in Computing*”, School of Computer Sciences, KBC North Maharashtra University, Jalgaon, February 21, 2018.
- 4) **Manoj P. Patil**, Satish R. Kolhe, “Comparative Analysis of Segmentation Techniques”, *National Conference on Current Trends in Software Developments* organized by M.J.College, Jalgaon, February 08-09, 2013.
- 5) **M.P.Patil**, S.R.Kolhe, “Automatic Image Categorization and Annotation using K-NN for Corel Dataset”, *National Conference in Advances in Computing* organized by Department of Computer Science, KBC North Maharashtra University, Jalgaon, March 16-17, 2012.
- 6) **Manoj P. Patil**, Satish R. Kolhe, “Automatic Corel Image Categorization and Annotation using MLP and K-NN”, *National Seminar on Natural language Processing and Data Mining(NLPDM – 2012)* organized by Department of Computer Science Veer Narmad South Gujarat University, Surat, March 3,4, 2012.
- 7) **M.P.Patil**, S.R.Kolhe, “Tagging 2D Shapes using Connectionist Approach”, *98th Indian Science Congress,2011* organized by SRM University, Chennai, January 3-7, 2011.
- 8) **M.P.Patil**, S.R.Kolhe, “2D Shape Tagging using Feedforward Neural Networks”, “*National Conference on Emerging Trends in Computer science and Information Technology*” organized by J. T. Mahajan College of Engineering, Faizpur (M.S.), March 4-5, 2010.
- 9) **M.P.Patil**, S.R.Kolhe, “Automatic Image Tagging: A Shape Feature Based Approach”, *National Conference on Natural Resource Management for Sustainable Development* organized by School of Environmental and Earth Sciences, KBC North Maharashtra University Jalgaon (M.S.), February 1-2, 2010.
- 10) **M.P.Patil**, S.R.Kolhe “Image Classification using Neural Network”, *97th Indian Science Congress,2010* organized by Indian Space Research Organization(ISRO), University of Kerala, Kerala, January 3-7, 2010.
- 11) **M.P.Patil**, S.R.Kolhe “Use of Expert Systems in Agriculture” at National Conference on “*Sustainable Rural Development: A Strategic Roadmap for Economic Excellence*” Organized by Department of Management Studies, KBC North Maharashtra University,

Jalgaon(M.S.) on September, 25-26, 2008.

- 12) S.R.Kolhe, **M.P.Patil**, “Business intelligence(BI) Tools and Techniques : Indian Scenario ” at National Conference on “*Going Global: Changing Prospects Of Indian Corporation*” Organized by Department of Management Studies, KBC North Maharashtra University, Jalgaon(M.S.) on January 10-11, 2008.
- 13) **M.P.Patil**, “Martin/Odell Approach for Object Oriented formalization”, presented at National Conference on “*Use of Computer and Internet for child development*”. Organized by S.S.V.P.S. Science college, Dhule (M.S.) on January 20-21, 2006.

State level Avishkar: (04)

- 1) **M.P.Patil**, “Image Annotation using Decision Trees and Rough Sets”, *State level Research Festival AVISHKAR-2013* organized by, KBC North Maharashtra University, Jalgaon, January 16-18 , 2014. (Second Prize)
- 2) **M.P.Patil**, “Automatic Image and Shape Annotation using Machine Learning”, *State level Research Festival AVISHKAR-2012* organized by, Dr. Balasaheb Sawant Konkan Krishi Vidyapith , Dapoli, January 7-9 , 2013.
- 3) **M.P.Patil**, “Experimental Analysis of different Machine Learning Techniques for Automatic Image Annotation”, *State level Research Festival AVISHKAR-2010* organized by, Maharashtra University of Health Sciences, Nashik, January 21-23 , 2011.
- 4) **M.P.Patil**, “Automatic Image Labeling using Feedforward Neural Network ”, *State level Research Festival AVISHKAR-2009* organized by Solapur University, Solapur(M.S.), January 11-13 , 2010.

University level Avishkar: (06)

- 1) **M.P.Patil**, “Image Annotation using Decision Trees and Rough Sets”, *University level Research Festival AVISHKAR-2013*, October 18-19 , 2013. (1st Prize)
- 2) **M.P.Patil**, “Automatic Image and Shape Annotation using Machine Learning”, *University level Research Festival AVISHKAR-2012*, December 13-14 , 2012. (2nd Prize)
- 3) **M.P.Patil**, “Automatic Image Categorization and Annotation using Machine Learning”, *University level Research Festival AVISHKAR-2011*, December 28-29 , 2011.
- 4) **M.P.Patil**, “Experimental Analysis of different Machine Learning Techniques for Automatic Image Annotation”, *University level Research Festival AVISHKAR-2010*, December 23-24 , 2010. (2nd Prize)
- 5) **M.P.Patil**, “Automatic Image Labeling using Feedforward Neural Network”, “*University level Research Festival AVISHKAR-2009*”, December 1-2 , 2009. (2nd Prize)
- 6) **M.P.Patil**, S.R.Kolhe “Performance Evaluation of Some Important Edge Detection Schemes” , “*University level Research Festival AVISHKAR-2008*” , December 12-13 , 2008.