### DR. MADHULIKA BHATIA



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### 000-0001-6833-5657

- Research guidance to Graduate, Postgraduate and Doctorate students in latest research areas (Guiding them for research papers writing, scientific documents
- (Computer Vision, Recognition, Detection and Classification Problems) Deep Learning, Machine Learning, Data Science, Cloud Computing.
- Program leader.
- Research guidance Ph.D Scholar(1) An Image Processing Based Prediction Model to Analyze Contaminates on Indian Plants), M.Tech Dissertation guidance(7), Undergraduate projects(more then 35)
- Role- Assigning innovative ideas to implement, Understanding design and flow of project elements, Identification of tools and approaches for implementation, result visualization, Literature survey, Research Paper writing and publishing in high impact factor journals and conferences.
- Program Leader -B.Tech 3 continent Program leader at Amity London( Managing Team of 130 students undergraduate students for research collaborations)

# Certifications/Trainings

- Two Months Course in Oracle from Aptech, Faridabad.
- ❖ One Month Course in CCNA from Silicon Valley, Gurgaon.
- ❖ Five days Training Program by IBM on BA as service and Cloud.
- ❖ Five Days Short Term Program, Data Science using R, NITTTR, Chandigarh.
- ❖ FDP, Use of SPSS in Data Management organized by Council of Doctoral Program, MRIIRS, Faridabad, Haryana.

## **Career Timeline**

### Amity University, Noida, India 2019-till date

- (Organizing Secretary, 11th International Conference, Confluence 2021,2022 Manuscript submission, Conference management system, Point of contact with authors for manuscript submission guidance, international collaboration, student and Faculty exchange,
- Program Leader (handling Amity University core processes, Showcasing interfaces, Student engagement), Research guidance(Industry internship, Independent research group, Term Papers, Research guidance to Undergraduate, postgraduate and doctoral students, guiding students for implementing Projects and research ideas for Magazine Article, Research publications in conference and journals)
- ❖ IEEE Student Branch Counselor.

#### Amity University, London, Dec 2019-Feb 2020

B.Tech 3 continent program, Handling one to one contact with Amity Noida, India Campus with Amity London, Campus (130 students) Research collaborations, project writing, Research Paper submission as outcomes of projects.

## Job Objective

**Current Role: Associate Professor**, Program Leader, Curriculum development

## Key Impact Areas

- Technical Leadership
- Research Leadership
- Project Management
- Research Guidance and Mentoring
- -Project Funding
- Requirement Gathering & **Analysis**
- Design & Development
- Client Engagement
- International Collaboration
- Problem definition
- Research methodology
- Result analysis
- -Research publishing documentation **Curriculum development** for teaching and learning

## IT Skills

**Working Knowledge** SPSS, R, MS Project 2000, Rational Rose, Statistical analysis, Matlab, Tableau, ML Azure Studio, H2O, IBM watson

#### MRIIRS, Faridabad, Haryana 2017-2019

 (Organizing Secretary, International Conference Comitcon-2019, teaching and training, International collaboration. Mentor- Independent research group.

#### Amity University, Noida 2011-2017

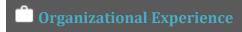
(Mentor, NTCC, Research mentor ship, Research coordinator, Handling Research Groups, International collaboration, MOU signing, showcasing eminent professors and scientist with innovative ideas and designing research documents, presenting flow diagrams, Team coordination for implementation, Copyrights, Organizing Expert Lectures and talks.

#### Apeejay College of Engineering, Gurgaon2007-2010

(Teaching, People Management, Event coordination)

#### BSAITM, Faridabad 2005-2007

(Teaching, Training, Project Management, People Management)



#### **Undergraduate Teaching**

Software Project Management, Management Information System, Software Engineering, Cloud Computing, IT service Management, Object Computing, Business Process Management, Operating System, Cloud Performance Tuning, BA as Service (Cloud), Business Intelligence, Security in Cloud, Advance Computing.

#### Postgraduate Teaching

Security and Virtualization in Cloud, IT service Management, Advance Software Project Management, Data Visualization

#### Key Result Areas: Training Organized and Coordinating activities

- Semester and Academic In charge Rama Groups of Institutions,2010 Semester and Academic In charge Rama Groups of Institutions,2010. In charge for faculty Files and designing Lab Manual documentation,2010.
- Active member International collaboration and MOU Signing between research Labs and Amity University, Noida.2011-2017.
- Head Library affairs, Rama Groups of Institutions,2010.
- Member of Research & Development Committee Amity University, Noida.2011-2017.
- Mentor M. Tech Programme,2013.
- Course Coordinator, Rama Groups of Institutions ,2013.
- Question Paper setter, Amity University, Noida and IPU, Delhi, G.D Goenka University, India.
- Student's activity In charge (Apeejay College of Engineering, Sohna) 2007-2010.
- Time Table coordinator (Apeejay College of Engineering, Sohna) 2009-2010.
- Provided Training to BE students of Computer Science & Information Technology during summer Industrial Training Programme on ASP. Net, BSAITM, Haryana, 2006.
- Faculty Representative and Member of Training and Placement cell for Campus held at BSAITM in 2007 for Satyam.
- Part of Interview panel for the "Cryptics society"-Society of CSE Dept in Apeejay, Sohna.
- M.Tech Dissertation coordinator, Amity University, Noida.
- $\bigstar \quad \textit{Member of International collaboration, Amity University, Noida}.$
- Alumini Lecture series incharge, Amity University, Noida.
- Overall coordinator Alumini meet for Aset, CSE.
- Overall coordinator for Annual Poster competition AppTech 2017 ASET, CSE.
- Overall Faculty coordinator, National Cyber Security Conference, MRIIRS, 7-9 march, 2018.
- Organizer Secretary Com-IT-Con-2019, MRIIRS.
- (Independent decision maker for all decisions, Publicity, IEEECrosscheck, Easy chair, designing of registration form, Website updation and maintenance, designing of certificates, Flex, Venue, Single point of contact with authors, Key note, session Chair, Revenue Generated 8 lakh Rs. Papers received 300, Accepted and Published 114.
- Organized Expert Lecture "Technology Enhanced Learning" by Prof. Don Passey , Lancaster University, UK, 15 Jan, 2018, MRIIRS.
- Organized Ethical Hacking Workshop, Android App: Innoskill 2018. 3-4 April, 2018.
- Invited at IETE, Lodhi Road, New Delhi for Question Paper Moderation.
- Coordinator- IT Infrastructure , IEEE and Student Chapter Counselor, MRIIRS, Faridabad.
- International Conference Organizing Secretory, Confluence, 2020, Confluence 2021.

### Significant Accomplishments:

- The Startup Event Connecting East & West | Startup Istanbul 2019. Idea get Selected among 155.279 startup applications and our Startup" Abodsy private limit" is selected to Startup Istanbul Top 100 Demo Dayin october.
- Got 9 rating out of 10 in Teaching by Special Vigilance Team in MRIIRS, Faridabad, Haryana, 2019.
- Participated in MIC- IIC Leadership Talk Ep. 04 Question Contest, 2019.
- First prize Student Technology Innovation Event at NGF, Faridabad with students Team, 2018.
- Women research Scientist award, VDGOOD,2020.
- Nominated for Honorable Prime Ministers Interaction with IT Professionals on 24th October 2018 @ 4.00pm - Live Program at DD Channel, MRIIRS, Faridabad.
- 2016 Research paper is nominated for best paper award in 24 th World Congress, 2016 at Imperial college, London, 29 June 2016 to 2 July, 2016.
- First prize in BOLLYWOOD MESH held at LINGYAS Institute of ENGG.
- ❖ Won first prize in CREATIVE WRITING HINDI in B.S.A.I.T.M.
- ❖ Won First Prize in QUIZ organized by BDOT-BSAITM Department of Technology.
- ❖ Won second prize for wall painting at IIT Roorkie.
- Won First prize in CREATIVE WRITING ENGLISH in Techno-Mgmt Fest (Elements Culmyca –2K4) Y.M.C.A INSTITUTE OF ENGG. Faridabad.
- ❖ Won Second Prize in Declamation in Techno-Mgmt Fest(Elements Culmyca −2K4)
- ❖ Y.M.C.A INSTITUTE OF ENGG. Faridabad,1999.
- ❖ Won Second Prize in Rangoli in Techno-Mgmt Fest (Elements Culmyca −2K4)

### **Consultancy Agreements**

- Nominated as Project mentor for Live Project with JP, Tokyo Limited, Japan for three groups.
- Develop Elastic search based data model and automated catalog import pipeline.
- Structure Elastic search indexing while importing heterogeneous data formats.
- Indexing product catalogue through elastic Search.

## **Academic Details**

- **Ph.D in Computer Science and Engineering** from Amity University, Noida in 2017 with 'A' grade.
- M.Tech in Computer Science and Engineering, Lingayas Institute of Management and Technology, Faridabad.2009.
- MBA in Information Technology, GJU, Hisar, 2007.
- **BE in Computer Science** from B.S. Anangpuria Institute of Technology and Management, Maharishi Dayanand University, Faridabad in 2005 with 78.75%, 2005.
- Diploma in Computer Science and Engineering, Govt. Polytechnic for Women, Faridahad
- Pursuing Advance Data Analytics 6 months course from IIT Kanpur, India.

### **Project Proposals writing experience**

- Written project proposal under DST in India South Africa collaborative program with Dr. Jean-Paul Van Belle, University of Cape Town, South Africa on Research barriers in private universities.
- Written Project proposal under India Brazil with Professor Jose Neuman de Souza, Federal University of Ceara – Brazil.
- Written project under DBT( North-East Twinning) project with Dr. Burah Don-Bosco University, Dr. Sarma Assam and Guwahati University on Comatose patients for neurosignals and got monetary award from respected founder Amity University, Noida, Dr. Ashok K. Chauhan.
- Project proposal under Indo- Egypt collaboration to DST on Enhancing Vocational Education.
- Submitted Project Proposal under Microsoft Research (MSR) India: Call for Collaborative Projects on Cloud and Al Technologies for Societal Impact" Recommendation System for Generating Menu for Perfect Healthy Meal to be cooked using Machine Learning: Indian cuisine" 15 Sept, 2018.

### **Research Publications**

### **International Journals**

- ❖ Bhatia, M., Bansal, A., & Yadav, D. (2017). A proposed quantitative approach to classify brain MRI. International Journal of System Assurance Engineering and Management, Springer 8(2), 577-584, Scopus, H-INDEX 20, Q3.
- ❖ Bhatia, M., Bansal, A., Yadav, D., & Gupta, P. (2015). A proposed stratification approach for MRI images. Indian Journal of Science and Technology, 8(22), 1, Scopus, H-INDEX 41, Q4.
- ❖ Bhatia, M., Bansal, A., Yadav, D., & Gupta, P. (2015). Proposed algorithm to blotch grey matter from tumored and non tumored brain MRI images. Indian journal of science and Technology, 8, 17, Scopus, H-INDEX 41, Q4.
- Bansal, A., & Yadav, D. (2015). Survey and comparative study on statistical tools for medical images. Advanced Science Letters, 21(1), 74-77, Scopus, H-INDEX 26, Q3.
- Agarwal, Bhatia, Collation: Implementing mono and hybrid approaches for feature extraction, International Journal of applied engineering research 10 (6), 15671-15678, H-INDEX 38,Q2.
- Shivam and Bareja, Pawan and Bhatia, Madhulika, Appearance of Machine and Deep Learning in Image Processing: A Portrayal (2018). International Journal of Computational Intelligence & IoT, Vol. 2, No. 4, 2018, Elsevier Available at SSRN: https://ssrn.com/abstract=3361144
- Shivam and Bareja, Pawan and Bhatia, Madhulika, Appearance of Machine and Deep Learning in Image Processing: A Portrayal (2018). International Journal of Computational Intelligence & IoT, Vol. 2, No. 4, 2018, Elsevier, Available at SSRN: https://ssrn.com/abstract=3361144.
- Sharma, K., & Bhatia, M. (2020). Deep Learning in Pandemic States: Portrayal. International Journal on Emerging Technologies, 2020, 11(3), pp. 707–714. H-INDEX 3, Q3.
- Aggarwal, S., Madaan, R., & Bhatia, M. (2020). Morphological based Optimized Random Forest classification for Indian Oxygen Plants, International Journal on Emerging Technologies, H-INDEX 3, Q3.
- Aggarwal, S., Bhatia, M., Madaan, R., & Pandey, H. M. (2021). Optimized Sequential model for Plant Recognition in Keras. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1022, No. 1, p. 012118). IOP Publishing. H-INDEX 31.
- Monika Mehta \* and Madhulika Bhadauria, "Performance Evaluation of Neural Network for Human Classification using Blob Dataset", Recent Advances in Computer Science and Communications (2021) 14: 1594. H-INDEX 11, Q4 .https://doi.org/10.2174/2666255813666190912101628.

- Eshan Bajal\*, Vipin Katara, Madhulika Bhatia and Madhurima Hooda, "A Review of Clustering Algorithms: Comparison of DBSCAN and K-mean with Oversampling and t-SNE", Recent Patents on Engineering (2021) 15: 1. H-INDEX 11, Q3. https://doi.org/10.2174/1872212115666210208222231.
- Anisha Bhatnagar and Madhulika Bhatia\*, "A Sentiment Analysis Based Approach for Customer Segmentation", Recent Patents on Engineering (2021) 15: 1. <a href="https://doi.org/10.2174/1872212115666210122161605">https://doi.org/10.2174/1872212115666210122161605</a>. H-INDEX 11.Q3.
- Aggarwal, S., Bhatia, M., Madaan, R., & Pandey, H. M. (2021). SVM Prediction Model Interface for Plant Contaminates. Traitement du Signal, 38(4). SCIE.
- An Expert System for Controlling Obesity and Overweight Issues among Urban and Semi-Urban School going Children (5-12 yrs): An Epidemiological Study, Journal of Clinical and Diagnostic Research, ESCI, Q3.(Published)
- Prevalence of IOT in pandemic: a portrayal in Enabling Healthcare 4.0 for Pandemics. A Roadmap Using AI, Machine Learning, IoT and Cognitive Technologies. In Press, Book Chapter.(Published)
- A Proposed Mathematical Model for Analyzing Medical images, Multimedia Tools and Applications, SCIE.H-INDEX 70, Q1.(in press)
- \* "Extraction of Posture Silhouettes using Human Posture Feature Points and Spatial Masks for Activity Recognition in Public Place" Journal of Engineering Research, SCIE, Q2.(Published)
- Design of Facial based touchless biometric system, ETCCS 2021, Springer, India(Published)
- Prediction of abnormal pregnancy in pregnant women with Advanced maternal age and Pregestational Diabetes using Machine learning models. Confluence 2022. (Published)

### Research papers-In review

- Prevalence of GitOps, DevOps in Fast CI/CD Cycles- Case study Journal of Information Technology Management, JITM-202107-2851.
- SOCIAL DISTANCING MONITOR USING YOLO V4, International Journal of System Assurance Engineering and Management, IJSA-D-21-00545.
- Automatic Video Censoring System using Deep Learning, International Journal of Electrical and Computer Engineering
- Predicting Emergency Healthcare Requirements using Deep Learning. Ingenierie des Systemes d'Information in (Proof read stage)
- Detection of Parkinson's disease in Alzheimer's patients utilizing brain imaging, Confluence 2021. Traitement du Signal, France (Accepted)
- Identity verification in passport management using semantic similarity, International Journal of System Assurance Engineering and Management, Springer.
- **t** Ear Biometry as a Unique Identification Tool: Confirming Ear Uniqueness for Pioneering Security. Maejo International Journal of Science and Technology.

### **International Conference Publications**

- Yadav, D., Gupta, P., Kaur, G., Singh, J., Gandhi, M., & Singh, A. (2013, September). Implementing edge detection for medical diagnosis of a bone in Matlab. In 2013 5th International Conference and Computational Intelligence and Communication Networks (pp. 270-274). IEEE. (Scopus)
- Bhatia, M., Bansal, A., Yadav, (2016, June). Implementing marker-controlled watershed segmentation for extracting features from neuron image. In 2016 24th World Congress for Engineers, Vol 1, London (U.K). Paper was nominated for best research Paper award. (Scopus)
- Agarwal, S., Bhatia, M., & Hooda, M. (2016). Emotion recognition: a step ahead of traditional approaches. In Information Systems Design and Intelligent Applications (pp. 721-729). Springer, New Delhi. (Scopus)
- Rai, P., Hooda, M., Dhir, S., Bhatia, M., & Garg, A. (2015, March). A prologue of JENKINS with comparative scrutiny of various software integration tools. In Computing for Sustainable Global Development (INDIACom), 2015 2nd International Conference on (pp. 201-205). IEEE(Scopus).

- Pandey, M., Bhatia, M., & Bansal, A. (2016, February). An anatomization of noise removal techniques on medical images. In Innovation and Challenges in Cyber Security (ICICCS- INBUSH), 2016 International Conference on (pp. 224-229). IEEE.(Scopus)
- Nandan, V., Dhir, S., & Garg, A, Madhulika (2015, October). Statistical analysis of Indian e-Pandey, M. (2016). An amalgamated strategy for iris recognition employing neural network and hamming distance. In information systems design and intelligent applications, pp. 739.
- Pandey, M., Bhatia, M., & Bansal, A. (2016, February). IRIS based human identification: Analogizing and exploiting PSNR and MSE techniques using MATLAB. In Innovation and Challenges in Cyber Security (ICICCS-INBUSH), 2016 International Conference on (pp. 231- 235). IEEE.(Scopus)
- Pandey, M. (2016). An amalgamated strategy for iris recognition employing neural network and hamming distance. In Information Systems Design and Intelligent Applications(pp. 739- 747).(Scopus)
- Aditi, Madhulika, (2017) "Software Quality Factors: Measures and Metrics" published In 4th International Conference on Innovations in Computer Science & Engineering (ICICSE-2016) published in Lecture notes on Networks and Systems. Springer Nature Singapore 747). Springer, New Delhi. (Scopus)
- Bhatia, M., Pandey, M., Kumar, N., & Hooda, M. (2017). Enacting Segmentation Algorithms for Classifying Fish Species. In Innovations in Computer Science and Engineering(pp. 39-49). Springer, Singapore.
- Jain, S., Poojitha, V., & Bhatia, M. (2018). A Cheiloscopic Approach for Unique Identification 1738). Springer, Singapore.
- Chaudhary, R., Garg, A., & Bhadauria, M. (2018). Predictive Analytics for LAMA and Absconding Behavior of Patient. In Smart Computing and Informatics (pp. 645-650). Springer, Singapore. (Scopus).
- Madaan, A., Bhatia, M., & Hooda, M. (2018). Implementation of Image Compression and Cryptography on Fractal Images. In Advances in Data and Information Sciences (pp. 49-61). Springer, Singapore. (Scopus).
- Chaudhary, R., Bhadauria, M., & Garg, A. (2017, August). Predictive analysis techniques for road accident injuries: A survey. In 2017 International Conference On Smart Technologies For Smart Nation (SmartTechCon) (pp. 91-96). IEEE.
- Aggarwal, Shilpi. & Bhatia, Madhulika. (2019, Feb). Anatomy of Leaf Classification Techniques. Poster presented at Com-it-Con 2019, MRIIRS, Faridabad. IEEE (Scopus)
- Manisha. & Bhatia, Madhulika. (2019, Feb). Role of Mathematics in Image Processing . Poster presented at Com-it-Con 2019, MRIIRS, Faridabad, IEEE. (Scopus).
- Aggarwal, Shilpi. & Bhatia, Madhulika. (2019, May). A New Method to Classify Leaves Using Data Visualization: Spreading Awareness About Global Warming. ICETIT-2019, Delhi, LNEE, Springer.
- Dwivedi, P., Chopra, J., & Bhatia, M. (2021, January). Detecting depression in different stages of Alzheimer using PET imaging. In 2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence) (pp. 487-493). IEEE.
- Rakhra, A., Jain, I., Gupta, R., & Bhatia, M. (2021, January). Predicting the Prevalence Rate of COVID-19 Falsity on Temperature. In 2021 11th International Conference on Cloud Computing, Data Science & Engineering (Confluence) (pp. 327-331). IEEE.

## **Book Chapters Published**

- BHATIA, D. M., & MITTAL, D. M. (2017). Big Data & Deep Data: Minding the Challenges. Deep Learning for Image Processing Applications, 31, 177.(Scopus). http://ebooks.iospress.nl/volumearticle/48030.
- Bhatia, M., Hooda, M., & Gupta, P. (2021). Deep Data Analytics: Future of Telehealth. In Research Anthology on Telemedicine Efficacy, Adoption, and Impact on Healthcare Delivery (pp. 274-295). IGI Global. <a href="https://www.igi-global.com/chapter/deep-data-analytics/273470">https://www.igi-global.com/chapter/deep-data-analytics/273470</a>
- Bhatia, M., Sharma, S., Hooda, M., & Debnath, N. C. (2020). A Machine Learning Approach Toward Meal Classification and Assessment of Nutrients Value Based on Weather Conditions. In Big Data Analytics and Intelligence: A Perspective for Health Care. Emerald Publishing Limited. <a href="https://www.emerald.com/insight/content/doi/10.1108/978-1-83909-099-820201019/full/html">https://www.emerald.com/insight/content/doi/10.1108/978-1-83909-099-820201019/full/html</a>
- Bhatia, M., Chaudhary, S., Hooda, M., & Unhelkar, B. (2020). Telehealth: Former, Today, and Later. In Big Data Analytics and Intelligence: A Perspective for Health Care. Emerald Publishing Limited.
  - https://www.emerald.com/insight/content/doi/10.1108/978-1-83909-099-820201020/full/html
- shan, B., Madhulika, B., Nautiyal, L., & Hooda, M. (2021). Deficiencies in Blockchain Technology and Potential

Augmentation in Cyber Security. Blockchain for Business: How It Works and Creates Value, 251-293.

https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119711063.ch12

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#### **Books Published**

- Bhatia, M., 2009. Introduction to computer network. Madhulika. ISBN: 978-81-318-0532-9. {Available on Amazon, Google Books, Rediff Books, Flipkart, Infibeam}. https://www.amazon.in/Introduction-Computer-Network-Madhulika Bhatia/dp/8131805328/ref=sr: 1 1?dchild=1&keywords=Introduction+to+computer+network+Madhulika&qid=1619083268&sr=8-1
- Bhatia, M.,2012. Facial Expression Recognition System, LAP LAMBERT Academic Publishing GmbH & Co. KG, Saarbrucken, Germany. {Available on Amazon, Google Books, Rediff Books, Flipkart, Infibeam}
  <a href="https://www.amazon.in/Facial-Expression-Recognition-System-Madhulika/dp/3848493810/ref=sr">https://www.amazon.in/Facial-Expression-Recognition-System-Madhulika/dp/3848493810/ref=sr</a> 1 1?dchild=1&keywords=Facial+Expression+Recognition+Syst

#### **Book Editorial**

- Data Visualization and Knowledge Engineering-Spotting Data points by Data Visualization with Artificial Intelligence (Web of Science, Springer. Editors: Hemanth, D. Jude, Bhatia, Madhulika, Geman, Oana <a href="https://www.springer.com/gp/book/9783030257965">https://www.springer.com/gp/book/9783030257965</a>
- Diagnostic Applications of Health Intelligence and Surveillance Systems, IGI Global Publishing .Editor: Divakar Yadav (National Institute of Technology, Hamirpur, India), Abhay Bansal (Amity University, India), Madhulika Bhatia (Amity University, India), Madhurima Hooda (Amity University, India) and Jorge Morato (Universidad Carlos III de Madrid, Spain)

 $\underline{https://www.igi-global.com/book/diagnostic-applications-health-intelligence-surveillance/255738\#table-of-contents}$ 

### **Upcoming Book Editorial**

Al and Virtual Reality, De Gruyter.



#### Applying AI-Based IoT Systems to Simulation-Based Information Retrieval

Bhatia Madhulika (Amity University, India), Bhatia Surabhi (King Faisal University, Saudi Arabia), Poonam Tanwar (Manav Rachna International Institute of Research and Studies, India) and Kuljeet Kaur (Université du Québec, Canada)

Pages: 300

DOI: 10.4018/978-1-6684-5255-4

ISBN13: 9781668452554 | ISBN10: 1668452553 | EISBN13: 9781668452561 | ISBN13 Softcover: 9781668452592

ISBN 13 SUILLOVEI: 97 6 100643239

E-learning: Transmutation in Classroom Experiences Using Various ICT Tools, by; Dr. Madhulika Bhatia, Banthom Science

### Articles in Magazine

- Ambient Intelligence: Technologies, Application and Opportunities" Madhulika, Shubham Sharma, Vol (42, Issue 12, Mar 2019
  - http://csi-india.org.in/Communications/CSIC March 2019.pdf
- Digital Democracy", Madhulika, Anchal Garg, Pratibha Das, (Vol 42, Issue 7, Oct 2017).
- Software Testing: An Insight of latest Tools and Techniques with a test script execution in Rational Robot", Abhishek, Madhurima, Saru Dhir, Madhulika, Anchal Garg. (Vol 38, Issue 5, Aug 2014).
- ❖ "Visualizing EEG Data using EEG Lab Tool Box in Matlab Conceptions and Perceptions". Madhulika, Anchal Garg, (Dr.) Abhay Bansal, Madhurima .(Vol 38, Issue 5, Aug 2014).

### **International Research Exposure**

- ❖ A joint project involving researchers from India and the UK in exploring whether undergraduate engineering students are gaining research skills to equip them for employment beyond their courses.

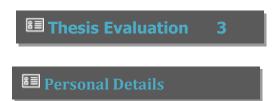
  Research Report published on "Research skills when and where do we develop them in higher education?" <a href="https://www.lancaster.ac.uk/educational-research/news-and-events/news/2018/research-skills--when-and-where-do-we-develop-them-in-higher-education/">https://www.lancaster.ac.uk/educational-research/news-and-events/news/2018/research-skills--when-and-where-do-we-develop-them-in-higher-education/</a>
- Research Proposal accepted for research Visit at Carnegie Mellon University, USA,2022.
- Research 2022-2023 : Federal University of Ceará Computer Science Department: Big Data Mining.

#### **Patent**

- Improved system and method for video object tracking using soft Computing techniques 2772/DEL/2013.
- Enhancing Surveillance system using AI techniques through fluoroscopy 2044/DEL/2015.(In Final Examination)
- IOT BASED SPEAKER REORGANIZATION SYSTEM, Application No.202211003534 A.

### Project Proposals written till now

- Project proposal under DST in India South Africa collaborative program with Dr. Jean-Paul Van Belle, University of Cape Town, South Africa on Research Barriers.
- Project proposal under India Brazil with Professor Jose Neuman de Souza, Federal University of Ceara Brazil.
- Project under DBT (North-East Twinning) project with Dr. Burah Don-Bosco University, Dr. Sarma Assam and Guwhati University and got monetary award from respected founder Sir Dr. Ashok K. Chauhan.
- Project proposal under Indo- Egypt collaboration to DST on Enhancing Vocational Education.
- Recently Filed project An Expert System for Controlling Obesity and Overweight Issues among Urban and Semi-Urban School going Children (5-12 yrs): An Epidemiological Study to DST.
- Project Proposal under Microsoft Research (MSR) India: Call for Collaborative Projects on Cloud and AI Technologies for Societal Impact" Recommendation System for Generating Menu for Perfect Healthy Meal to be cooked using Machine Learning: Indian cuisine" 15 Sept, 2018.
- ❖ INSA, SIRE, DST



Date of Birth: 07th Feb 1984|| Languages Known: English, Hindi Address: Faridabad.