Curriculum Vitae

DR. SHRADDHA K. KHARADE

Assistant Professor,

Department of Mathematics,

Shivaji University, Kolhapur

Email: shraddha.k.kharade@gmail.com

DOB: 13/08/1989

Educational Qualifications

Course	University	Year of Passing	Percentage
Ph.D	Shivaji University, Kolhapur	2020	Awarded
MCA (Science)	Shivaji University, Kolhapur	2013	62.58 %
BCS	Shivaji University, Kolhapur	2010	62.80 %

Ph.D Topic: Artificial Intelligence Based Techniques For Predictive Modelling of Energy Conversion and Energy Storage Devices

Awards: Best Performer in Artificial Intelligence

Received from: International Association of Research and Developed Organization (RACE-2020 Bangkok) on 28th October 2020

Experience as Assistant Professor (06+ years)

Department/University	Period
Department of Mathematics, Shivaji University, Kolhapur, Maharashtra	20thJan 2016 To till date

Indian Patent Filed

1. Artificial Neural Network Based Method for Predicting The Efficiency of Dye Synthesized Solar Cells(Patent Application No: 202021004256)
2. ANN Approach Towards Predicting Efficiency of MoS_2 Supercapacitor (Patent Application No: 202021004259)

3. An Elegant Way of Calculating Charge Capacity Using ANN for Lithium-Ion Batteries(Patent Application No: 202021004254)

Books Published

1. Dr. Sheetal M. Randhir, Dr. Shraddha K. Kharade, Dr. Arun S. Mokashi (2021), Business Ethics by Nirali Prakashan

Book Chapters Published

1. S. K. Kharade, K. G. Kharade, S. V. Katkar, R. K. Kamat, Simulation of Dye Synthesized Solar Cell Using Artificial Neural Network: Brief Overview , Emerging Trends in Engineering Research and Technology Vol. 1, Chapter 6, Editor- Dr. Anuj Kumar Goel, Print ISBN: 978-93-89816-50-1, eBook ISBN: 978-93-89816-51-8, P.P. 73-86, Publication Date: 02/03/2020, DOI: https://doi.org/10.9734/bpi/etert/v1

2. K. G. Kharade, S. K. Kharade, V. S. Kumbhar, R. K. Kamat, A Comparative Analysis Using Indexed View to Improve the Performance of SQL, Recent Developments in Engineering Research Vol.1, Chapter 2, Editor- Dr. P. Elangovan, Print ISBN: 978- 93-90149-67-4, eBook ISBN: 978-93-90149-19-3, P.P. 6-13, Publication Date:14/07/2020, DOI: https://doi.org/10.9734/bpi/rder/v1

3. K. G. Kharade, S. K. Kharade, S. V. Katkar, R. K. Kamat, Performance Improvement Using Covering Index to Reduce Row Identifier Lookups, Recent Advances in Science and Technology Research Vol.3, Chapter 11, Editor- Dr. Mohd Rafatullah, Print ISBN: 978-93-90149-41-4, eBook ISBN: 978-93-90149-40-7, PP 114-119, Publication Date: 25/07/2020, DOI: https://doi.org/10.9734/bpi/rastr/v3

4. S. K. Kharade, K. G. Kharade, K. S. Oza, R. K. Kamat, Selection of Table Scan or Seek-Scan based on Data Size to Reduce Number of Logical Reads, Theory and Practice of Mathematics and Computer Science Vol.1, Chapter 3, Editor- Dr. Belkacem Chaouchi, Print ISBN: 978-93-90149-72-8, eBook ISBN: 978-93-90149- 22-3, P.P. 26-32, Publication Date: 17/08/2020, DOI: https://doi.org/10.9734/bpi/tpmcs/v1

5. K. G. Kharade, S. K. Kharade, S.V.Katkar, R. K. Kamat, Selection of Small Index to Reduce the Number of Pages for Improving Efficiency, Recent Studies in Mathematics and Computer Science Vol.4, Chapter 5, Editor- Dr. Luigi Giacomo Rodino, Print ISBN: 978-93-90206-11-7, eBook ISBN: 978-93-90206-12-4, P.P. 66- 71, Publication Date: 15/08/2020, DOI: https://doi.org/10.9734/bpi/rsmcs/v4

6. S. V. Katkar, K. G. Kharade, S. K. Kharade, R. K. Kamat, An Intelligent Way of Modeling and Simulation of WO3 for Supercapacitor, Recent Studies in Mathematics and Computer Science Vol.3, Chapter 11, Editor- Dr. Narayan Thapa, Print ISBN: 978-93-90149-52-0, eBook ISBN: 978-93-90149-51-3, PP 109-117, Publication Date: 15/08/2020, DOI: https://doi.org/10.9734/bpi/rsmcs/v3

7. S. K. Kharade, K. G. Kharade, V. S. Kumbhar, R. K. Kamat,Evaluation of Arithmetic Searches over String Searches for Better Performance, Theory and Practice of Mathematics and Computer Science Vol. 1, Chapter 2, Editor- Dr. Belkacem Chaouchi, Print ISBN: 978-93-90149-72-8, eBook ISBN: 978-93-90149-22-3, PP 20- 25, Publication Date: 17/08/2020, DOI: https://doi.org/10.9734/bpi/tpmcs/v1

8. S. K. Kharade, K. G. Kharade, R. S. Kamath, R. K. Kamat, Usage of Unique Key for Improvement of Performance in Table Scanning, Recent Advances in Science and Technology Research Vol. 4, Chapter 4, Editor-Dr. Suraya Hani Bt Adnan, Print ISBN: 978-93-90206-19-3, eBook ISBN: 978-93-90206-20-9, P.P. 40-45, Publication Date: 19/08/2020, DOI: https://doi.org/10.9734/bpi/rastr/v4

9. S. V. Katkar, S. K. Kharade, K. G. Kharade, R. K. Kamat, Integration of Technology for Advancement In Supply Chain Management, New Paradigms in Business Management Practices Vol 3 Chapter 15, Editor- Sruthi S, ISBN: 979-8-579-38928-2, PP 116-123, Publisher:Amazon, Publication date: 31/12/2020, kindle link: https://www.amazon.com/dp/B08RP1MX5P/ref=sr_1_1?dchild=1&keywords =new+paradigms+in+business+Management+practices&qid=1609345501&sr =8-1

10. K. G. Kharade, S.V.Katkar, S. K. Kharade, M.S.Sawant, R. K. Kamat, Review of Home Automation Strategies Analysis using Sensors, Progression in Science, Technology and Smart Computing, Chapter 34, Editor Dr. Neha

Joshi, ISBN – 978- 81-948061-2-7, PP 246-251, Prarup Publication, Publication date 20/06/2021

11. K. G. Kharade, S.V.Katkar, S. K. Kharade, M.S.Sawant, R. K. Kamat, Influence of Content Delivery Network during Content Delivery, Progression in Science, Technology and Smart Computing, Chapter 45, Editor Dr. Neha Joshi, ISBN – 978- 81-948061-2-7, PP 324-328, Prarup Publication, Publication date 20/06/2021

12. B.P.Patil, K. G. Kharade, S. K. Kharade, R. K. Kamat, Significant Study of Data Encryption and Steganography, Recent Advances in Mathematical Research and Computer Science Vol. 1, Chapter 10, Editor Dr. Luigi Giacomo Rodino, 978-93- 5547-071-3 (Print) 978-93-5547-072-0 (eBook), PP 79-91, Publication Date: 15/10/2021, https://doi.org/10.9734/bpi/ramrcs/v1/6978D

13. Katkar, S. V., Kharade, K. G., Patil, N. S., Sonawane, V. R., Kharade, S. K., & Kamat, R. K. (2021). Predictive Modeling of Tandem Silicon Solar Cell for Calculating Efficiency. In M. Singh, V. Tyagi, P. K. Gupta, J. Flusser, T. Ören, & V. R. Sonawane (Eds.), Advances in Computing and Data Sciences (Vol. 1441, pp. 183–194). Springer International Publishing. https://doi.org/10.1007/978-3-030-88244-0_18

14. Kharade, K. G., Katkar, S. V., Patil, N. S., Sonawane, V. R., Kharade, S. K., Pawar, T. S., & Kamat, R. K. (2021). Text Summarization of an Article Extracted from Wikipedia Using NLTK Library. In M. Singh, V. Tyagi, P. K. Gupta, J. Flusser, T. Ören, & V. R. Sonawane (Eds.), Advances in Computing and Data Sciences (Vol.1441, pp. 195–207). Springer International Publishing. https://doi.org/10.1007/978-3- 030-88244-0_19

15. Kharade, K. G., Kharade, S. K., Sonawane, V. R., Bhamre, S. S., Katkar, S. V., & Kamat, R. K. (2021). IoT Based Security Alerts for the Safety of Industrial Area. In Advances in Parallel Computing (pp. 98–103). IOS Press.

16. Chougale, N. P., Kharade, K. G., Kharade, S. K., Ghatage, S. R., Mendagudli, M. G., Yuvaraj, S., & Vengatesan, K. (2021). Deployment of Computer Assisted Instruction in Higher Educational Organization. In Advances in Parallel Computing (pp. 461– 466). IOS Press.

17. Naikwadi, B. H., Kharade, K. G., Yuvaraj, S., & Vengatesan, K. (2021). A Systematic Review of Blockchain Technology and Its Applications. In Advances in Parallel Computing (pp. 467–473). IOS Press.

18. Kharade, K. G., Kharade, S. K., Ghatage, S. R., Kumbhar, V. S., Ravishankar, T., & Vengatesan, K. (2021). EyePhone Technology: A Smart Wearable Device. In Advances in Parallel Computing (pp. 474–479). IOS Press.

19. Katkar S.V., Kharade K. G., Kharade S. K., Muppalaneni N.B., Vengatesan K., Kamat R.K. (2022) Implementation of ANN for Examining the Electrical Parameters of Cadmium Sulfide Solar Cell. In: Satyanarayana C., Gao XZ., Ting CY., Muppalaneni N.B. (eds) Machine Learning and Internet of Things for Societal Issues, Chapter 12. Advanced Technologies and Societal Change. Springer, Singapore. https://doi.org/10.1007/978-981-16-5090-1_12 PP 137-146

National/International Journal Publications

1. K G.Kharade, S.K.Kharade, "Comparative Analysis of RSA and DES Algorithms", International Journal of Advanced Computer Technology & Management (IJACTM), ISSN: 2343-662X, Volume: I, Issue: I, May 2016 PP 20-22

2. K. G. Kharade, V. S. Kumbhar, S. K. Kharade, "A Comparative Study of Traditional Server and Azure Server", Journal of Advances in Science and Technology (JAST), Volume:13, Issue:1, E-ISSN:2230-9659, ISSN: 2230-9659 Mar-2017, PP- 329 – 331(O)

3. K.G.Kharade, S.K.Kharade, K.S.Oza, "Security Threats In Ecommerce", "Indian Journal of Innovation In Management And Excellence In Research (IJIMER)" ISBN: 978-81-926976-7-3, Vol 2 January 2018 PP 14-17

4. K.G.Kharade, S.K.Kharade, V.S.Kumbhar, "Impact of Digital India on Various Sectors", "Indian Journal of Innovation in Management and Excellence In Research (IJIMER)" ISBN: 978-81-926976-7-3, Vol 2 January 2018 PP 37-40

5. K.G.Kharade, R.K.Kamat, R.R.Mudholkar, S.K.Kharade, "Removable Drive Blocker Application for Virus Detection","International Journal of Research Culture Society", ISSN: 2456-6683 Volume - 2, Issue - 4, Apr – 2018, Impact Factor: 3.449, PP 233-234

6. K.G.Kharade, S.K.Kharade, S.V.Katkar, "Cyber Security-A Method of Generic Authentication of Data with IP Security", "International Journal of Information Systems", ISSN(print) 2229-5429 Volume IX, Issue II, January-May 2019, Impact Factor 5.406 PP 63-66

7. K.G.Kharade, R. K. Kamat S.K.Kharade, S.V.Katkar, "Automation of Paper Setting Process to Improve Effectiveness of The Examination System of The University",

International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.6, Issue 2, page no.490-493, February-2019

8. S.V.Katkar, R. K. Kamat, K.G.Kharade, S.K.Kharade, "Inclusion of .NET framework for Calculating electrical parameters of solar cell" , "International Journal of Research in electronics and Computer Engineering (IJRECE) ", ISSN: 2393-9028 (PRINT) | ISSN: 2348-2281 (Online), Vol. 7 Issue 1 (January- March 2019) , PP 1167-1169

9. K.G.Kharade, R.R.Mudholkar, R.K.Kamat S.K.Kharade, "Perovskite Solar Cell Simulation using Artificial Neural Network", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.6, Issue 6, PP 336-340, June-2019

10. K.G.Kharade, R. K. Kamat S.K.Kharade, "Online Library Package to Boost the Functionality and Usability of the Existing Libraries". International Journal on Future Revolution in Computer Science & Communication Engineering (IJFRSCE), Volume 5, Issue 8, PP 5-7, August-2019

11. K.G.Kharade, R.R.Mudholkar, R. K. Kamat, S.K.Kharade, "Artificial Neural Network Modeling of CZTS Solar Cell For Predicative Synthesis And Characterization", International Journal of Research And Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Vol.6, Issue 2, PP 997-1006, June-2019

12. S. K. Kharade, R. K. Kamat, K. G. Kharade, "Artificial Neural Network Modeling of MoS2 Supercapacitor for Predicative Synthesis", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-2, page no. 554-560, December 2019 (Scopus)

13. S. K. Kharade, R. K. Kamat, K. G. Kharade, "Simulation of Dye Synthesized Solar Cell using Artificial Neural Network", International Journal of Engineering & Advanced Technology (IJEAT), ISSN 2249-8958 (online), Volume-9 Issue-2, December 2019, PP1316-1322 (Scopus)

14. S.V.Katkar, R.K.Kamat, K.G.Kharade, S.K.Kharade, R.S.Kamath, "Simulation of Cd(SSe) Solar Cell Using Artificial Neural Network", "International Journal of Advanced Science and Technology", ISSN: 2005-4238 (Print), 2207-6360 (Online) Vol. 29, No.02, January 2020, pp. 2583-2591 (Scopus)

15. S. K. Kharade, R. K. Kamat, K. G. Kharade, R. S. Kamath, S. A. Shinde, "Artificial Neural Network Based Efficiency Prediction and Its Impact on Dye Synthesized Solar Cell", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-5, January 2020, PP 2696-2699 (Scopus)

16. S.K.Kharade, K.G. Kharade, R.K.Kamat, V.S.Kumbhar, "Setting Barrier to Removable Drive through Password Protection for Data Security", "Our Heritage", ISSN: 0474-9030, Vol 68(27) February 2020, PP 19-23

17. S.K.Kharade, K.G. Kharade, R.K.Kamat, S.V.Katkar, "Designing an Online Learning System with Data Mining Techniques", "Our Heritage", ISSN: 0474-9030, Vol 68 (27) February 2020, PP 63-68

18. Suvarna M Patil, Ayesha R Mujawar, K.G.Kharade , S.K.Kharade, S.V.Katkar, R.K.Kamat, Drowsy Driver Detection Using Opencv And Raspberry Pi3, Webology, ISSN: 1735-188X Volume 19, Issue 2, 2022, PP 6003-6010(Scopus)

19. M.S.Sawant,K.G.Kharade,S.K.Kharade,V.S.Kumbhar,S.V.Katkar,R.K.Kamat, The Ramifications of Integrating Data Science Into Commercial Ventures, Aayushi International Interdisciplinary Research Journal (AIIRJ), Special issue No.107, March 2022, PP 141-146, ISSN 2349-638x, IF 7.331, (Peer Reviewed)

20. K. Vengatesan, A. Kumar, A. Kumar, K. G. Kharade, S. K. Kharade and R. K. Kamat, "Stock Market Analysis using Time Series Data Analytics Techniques," *2021 International Conference on Computing, Communication and Green Engineering (CCGE)*, May 2022, IEEE Xplore, pp. 1-5, doi: 10.1109/CCGE50943.2021.9776372.(Scopus)

International Conference Publications

1. K.G.Kharade, V.S.Kumbhar, S.K.Kharade, "Providing Three Layer Security through Pictographic Password to Protect Sensitive Data from Intruders" ,"Interdisciplinary International Conference on Skill Development in Higher Education" organized by Shree Maharani Tarabai Government College of Education ,Kolhapur on 02nd February, 2019

2. S.K.Kharade, S.V.Katkar, K.G.Kharade,V.S.Kumbhar, R.K.Kamat, The Role of Computer-Assisted Language Learning in Language Learning, One day International Conference on Recent Trends in Science and Technology oreganized by Willingdon College, Sangli, held on 29/06/2022

3. S.V.Katkar, S.K.Kharade, K.G.Kharade, R.K.Kamat, Study of Cloud Computing And Its Architecture, One day International Conference on Recent Trends in Science and Technology oreganized by Willingdon College, Sangli, held on 29/06/2022

National Level Conference Publications

1. K.G.Kharade, S.K Kharade, "Impact of E-Commerce on Buyer, Seller, Manufacturer and Society" in National conference on "Resilience Of The Organizations For Sustained Development" organized by KIT's Institute of Management Education and Research, Kolhapur on 10th October, 2015.

2. K. G. Kharade, S. K. Kharade, N. P. Chougale "Prevention from DDoS attacks on educational or government websites using Cracking Algorithm" in National conference on "Resilience of The Organizations For Sustained Development" organized by KIT's Institute of Management Education and Research, Kolhapur on 10th October, 2015.

3. K. G. Kharade, S. K. Kharade, P. S Karmarkar, "Use of Bootstrapping To Enhance the Usability of Websites" , National conference on "Resilience Of The Organizations For Sustained Development" organized by KIT's Institute of Management Education and Research, Kolhapur on 10th October, 2015.

4. K. G. Kharade, P.T.Goyal, S. K. Kharade "Use of Cloud Computing In the Digitization of University", National conference on "Resilience Of The Organizations For Sustained Development" organized by KIT's Institute of Management Education and Research, Kolhapur on 10th October, 2015.

5. K.G.Kharade, R.K.Kamat, S.K.Kharade, "Utilization of Copy Logger Software Package to Protect Sensitive Data from Malicious Individuals" in National conference on "Innovative Trends in Electronics and Allied Technology (ITEAT-2017)" organized by Yashvantrao Chavan Institute of Science, Satara on 23rd February, 2017 Page No 19

6. K.G.Kharade, R.K.Kamat, S.K.Kharade, "Potential of India To Boom With The Ease of E-Commerce" in National conference on "Innovative Trends in Electronics and Allied Technology (ITEAT-2017)" organized by Yashvantrao Chavan Institute of Science, Satara on 23rd February, 2017 Page No 28

7. K.G.Kharade, R.K.Kamat, S.K.Kharade, "Review On Microsoft Windows Azure Technology" in National conference on "Innovative Trends in Electronics and Allied Technology (ITEAT-2017)" organized by Yashvantrao Chavan Institute of Science, Satara on 23rd February, 2017 Page No 33

8. S.K.Kharade, K.G.Kharade, R.K.Kamat, "Inclusion of ICT in the Field of Rural Segments" in"National Conference on Rural Livelihood Models for Sustainable Development" organized by Yashvantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 14th September, 2017 and 15th September, 2017

9. S.K.Kharade, K.G.Kharade, R.K.Kamat, "Opportunities and Challenges of ICT in Rural Development","National Conference on Rural Livelihood Models for Sustainable Development" organized by Yashvantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 14th September, 2017 and 15th September, 2017

10. Meenal Meenal G. Chonde, S.K.Kharade "The Role of ICT in Rural Development" in "National Conference on Rural Livelihood Models for Sustainable Development" organized by Yashvantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 14th September, 2017 and 15th September, 2017

11. S.K.Kharade, K.G.Kharade, V.S.Kumbhar, "Impact of E-Commerce India On Various Sectors","National Conference on Transformation in Commerce, Management, Economics and Social Sciences in Globalized era" organized by KIT's IMER and Department of Commerce and Management, Shivaji University Kolhapur on 24[th]January, 2018

12. K.G.Kharade, S.K.Kharade, N.P.Chougale, "Use of Cloud Computing for Linking Services" ,"National Conference on New Approaches Of Corporate Sustainability and Digital India" organized by KIT's Institute of Management Education & Research on 2nd February, 2019

13. K.G.Kharade, S.K.Kharade, N.P.Chougale, "Inclusion of Mobile Computing to Move towards Cashless Economy", in "National Conference on New Approaches Of Corporate Sustainability and Digital India" organized by KIT's Institute of Management Education & Research on 2nd February, 2019

National Level Workshop/Conference/Seminar Attended

1. Participated in "Two days national workshop on Big data analytics with Hadoop" organized by Department of Computer Science, Shivaji University, Kolhapur in association with C-DAC, Pune during 5th April, 2017 & 6th April, 2017

2. Participated in One day Workshop of "One Day State Level Workshop on Inculcating Value System in Students : Pedagogical Practices in Higher Education" on 2nd January, 2018 at Shivaji University Kolhapur

3. Participated in One day Workshop for-"Scientific Writing at V.S.Khandekar Bhawan" on 31st January, 2018 at Language Department, Shivaji University Kolhapur

4. Participated in One day Workshop for "Spoken Tutorial, IIT Bombay Master Training Program" on 12th February, 2018 organized by Department of Technology, Shivaji University Kolhapur

5. Participated in One day Workshop for "Employability Enhancement Program" organized by Placement Cell, Shivaji University and ITM for Institutions on 6th October, 2018

6. Attended one day workshop for Coordinators of Avishkar Research Competitions held on 31st October, 2018 at Department of Education, Shivaji University, Kolhapur

7. Attended one day workshop for Coordinators of Beti Bachao Abhiyan held on 24th December, 2018 at Language Department, Shivaji University Kolhapur

8. Participated in one day webinar on "Coping After COVID 19: A New Era for Students & Academicians" organized by IEEE Blended Learning Program & Kolhapur Institute of Technology's College of Engineering (Autonomous), Kolhapur on 2nd May 2020

9. Participated in one day Alumni Webinar Series on "AWS Cloud Services And Their Usage" organized by Computer Engineering Department of K J College of Engineering and Management Research, Pune-48 on 3rd June 2020

10. Participated in an online workshop on "Text Analytics Using Python" organized by Institute of Management Technology Hyderabad on 23rd June 2020

Extension Activities Carried Out

1. Delivered lectures for M.Sc (Tech) Mathematics, Shivaji University, Kolhapur students under UGC Scheme of Remedial Coaching for SC/ST students for the year 2015-2016

2. Delivered lectures for M.Sc (Tech) Mathematics, Shivaji University, Kolhapur students under UGC Scheme of Remedial Coaching for SC/ST students for the year 2016-2017

3. Worked as coordinator for "Beti Bachao Abhiyan", Shivaji University, Kolhapur for the year 2017-2018

4. Worked as coordinator for "Beti Bachao Abhiyan", Shivaji University, Kolhapur for the year 2018-2019

Worked as Resource Person

1. Delivered a lecture in the subjects Computer Science on topic Introduction in Python by Department of Computer Science, Vivekanand College, Kolhapur on 04/03/2021.
2. Delivered a lecture in the subjects Computer Science on topic Projects in Python by Department of Computer Science, Shivraj College Gadhinglaj on 23/04/2021.

Faculty Development/Orientation Program

1. Participated in "Five days Faculty development program on Android training" organized by Department of Computer Science, Shivaji University Kolhapur in association with Google during 2nd Jan, 2017 to 6th Jan, 2017
2. Participated in Two Days "Quick Heal Sponsored Faculty Development Programme on C and C++: Industry" organized by Department of Computer Science, Shivaji University, Kolhapur in association with Quick Heal Foundation, Pune during 14th July, 2017 & 15th July, 2017
3. Participated in One Day Faculty Orientation Program on revised syllabus (Java Programming MCA II) held on Friday, 29th September, 2017 at KIT's Institute of Management Education & Research, Kolhapur
4. Participated in Two Days Faculty Development Program on "Recent Trends in Computer Science & Engineering and Information Technology" during 28th September, 2017 to 29th September, 2017 at Bharti Vidyapeeth's College of Engineering Kolhapur
5. Participated in Seven Days Faculty Development Program on "Cyber Security" Security sponsored by MHRD under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) at Faculty Development Centre in Cyber Security & Data Sciences, Department of Computer Science, Shivaji University, Kolhapur during 26/11/2018 to 02/12/2018
6. *Participated in Seven Days Faculty Development Program on "Data Science" sponsored by MHRD under the scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) at Faculty Development Centre in Cyber Security & Data Sciences, Department of Computer Science, Shivaji University, Kolhapur during 10/12/2018 to 16/12/2018*
7. *Participated in One Day National Level Faculty Development Workshop on cyber security organized by Faculty Development Centre in Cyber Security & Data Science Shivaji University, Kolhapur on 10th April 2020.*

8. Participated in one week Faculty Development Program on Python 3.4.3 organized at Pimpri Chinchwad College of Engineering and research, Pune in association with spoken tutorial project, IIT Bombay during 20/04/2020 to 25/04/2020

9. Participated in one week Faculty Development Program on Java Business Application organized by Department of Information Technology, RMD Sinhgad School of Engineering, Pune in association with spoken tutorial project, IIT Bombay during 27/04/2020 to 02/05/2020

10. Participated in AI and ML Course for Professors and Research Scholars (AIMLCPRS01) organized by Cognifront during 20/06/2020 to 20/07/2020

11. Participated in International faculty development programme on "Research Methodology and Techniques" organized by Sandip Institute of Engineering and Management Nashik during 04/07/2020 to 06/07/2020

12. Participated in the Android Development with Kotlin Train-the-Trainer program organized by Google Developers during 28/09/2020 to 03/10/2020

13. Participated in Three days National Level Online Faculty Development Program on Research Tools for Data Science organized by Engineering Sciences Department, MMIT, Pune during 29/03/2022 to 31/03/2022

Member of Committee

1. National Seminar on Differential Equations and Dynamical Systems -2017" organized by Department of Mathematics, Shivaji University, Kolhapur, during February 27-28, 2017

2. National Mathematics Day-2017 organized by Department of Mathematics, Shivaji University, Kolhapur, on 26th February 2018

3. National workshop on Linear Algebra and its applications-2018 organized by Department of Mathematics, Shivaji University, Kolhapur, during February 28 to March 05, 2018

4. National Mathematics Day-2018 organized by Department of Mathematics, Shivaji University, Kolhapur, on 15thFebruary 2019

5. National Mathematics Day-2019 organized by Department of Mathematics, Shivaji University, Kolhapur, on 11th January 2020

6. National seminar on Algebra -2020 organized by Department of Mathematics, Shivaji University, Kolhapur, during February 14-15, 2020

7. National Mathematics Day-2020 organized by Department of Mathematics, Shivaji University, Kolhapur, on 09th March 2021

8. National Mathematics Day-2021 organized by Department of Mathematics, Shivaji University, Kolhapur, on 11th January 2022

9. Workshop on Recent Trends in Computer Applications-2022 organized by Department of Mathematics, Shivaji University, Kolhapur, on 12-17 March 2022

10. National Conference on Mathematical Analysis and Applications-2022 organized by Department of Mathematics, Shivaji University, Kolhapur, on 21-22 March 2022