

Department of Information Technology

Annual Report 2020-21

1. Details of Research Publications AY 2019-20:

SN	Type of Publication	Title of Paper	Names of Authors	Journal / Conference Details	Date of Publication
01	International Conference	“Paralelization of Deep Convolutional Neural Network”	Umesh Chavan and Dinesh Kulkarni	International Conference on “Machine Intelligence & Smart Computing (ICMISC-2020)	21st -22nd May, 2020.
2	International Journal	ModQUIC Protocol Performance Verification with CUBIC and BBR Congestion Control Mechanism, International Journal of Internet Protocol Technology	Dr. Prashant Kharat	International Journal of Internet Protocol Technology by Inderscience (SCI)	4th, July 2020
3	International Journal	Modified QUIC Protocol with Congestion Control for Improved Network Performance	Dr. Prashant Kharat	IET Communications (SCI)	15th Feb 2021
4	International Conference		Dr. Prashant Kharat	International conference on Sigal Processing and Communications (SPCOM2020)	19th-24th July 2020
5	International Conference	Drowsiness Detection System Using Opencv And Raspberry Pi: An Iot Application	Abhijeet Urunkar	Artificial Intelligence and Sustainable Engineering (AISE-2020)	18 th -20 th January 2020
6	International Conference	Machine learning Techniques and Algorithms: A Survey	B. S. Shetty	1st international conference on advances in information, computing and trends in data Engineering (ICAICDE-2020)	11th and 12th December 2020
7	International Journal	ACO-IBR: A Modified Intersection-Based Routing Approach for the Vehicular Ad-Hoc Network	Dr. S.P.Sonavane	IET Networks	Nov 2020
8	International Journal	Co-occurrence patterns based fruit quality detection for hierarchical fruit image annotation	Dr. S.P.Sonavane	Journal of King Saud University - Computer and Information Sciences	26 November 2020
9	International Journal	Stacked GRU based Image Captioning	Dr. S.P.Sonavane	Solid State Technology	07 October 2020
10	International Journal	A novel gradient foster shared-representation convolutional network optimization for multi-modalities	Dr. S.P.Sonavane	Multimedia Tools and Applications	29 th April 2021
11	International Journal	Analysis of Connectivity Duration In Vehicular Network	Dr. S.P.Sonavane	Turkish Journal of Computer and Mathematics Education (TURCOMAT)	2021
12	International Journal	Experimenting with Reordering Model of Phrase-Based Machine	Dr. S.P.Sonavane	Next Generation Information Processing System	2021

		Translation System for English to Hindi			
13	International Journal	Performance of routing protocols using mobility models in vanet	Dr. S.P.Sonavane	Next Generation Information Processing System	2021
14	International Journal	Investigation of Imbalanced Big Data Set Classification: Clustering Minority Samples Over Sampling Technique	Dr. S.P.Sonavane	Next Generation Information Processing System	2021
15	International Journal	Experimenting with factored language model and generalized back-off for Hindi	Dr. S.P.Sonavane	International Journal of Information Technology	28 th Aug 2020
16	International Journal	Particle swarm optimization based routing method for vehicular ad-hoc network	Dr. S.P.Sonavane	2020 international conference on communication and signal processing (ICCSP)	28 th July 2020
17	International Journal	Language Identification for Multilingual Machine Translation	Dr. S.P.Sonavane	2020 International Conference on Communication and Signal Processing (ICCSP)	28 th July 2020
18	International Journal	Crop Nutrition Medicines Selection for Papaya using Analytical Hierarchy Process	Dr. A. J. Umbarkar Dr. R. R. Rathod	Solid State Technology	31 st Dec 2020

2. Google Scholar

Name of Faculty	Designation	Google Scholar							
		2016 Onwards			All			No. of Publications	
		Citations (since 2016)	h-Index	i-10 Index	Citations	h-index	i-10 index	Cited	Reported
Dr. Dinesh Balkrushna Kulkarni	Professor	50	4	1	82	5	2	18	27
Dr. Shefali Pratap Sonavane	Associate Professor	120	6	4	135	7	5	27	61
Dr. Anantkumar Janardan Umbarkar	Assistant Professor	380	8	8	418	9	9	27	38
Dr. Ravindra Ramkishan Rathod	Assistant Professor	43	2	1	44	2	1	4	6
Umesh Balkrushna Chavan	Assistant Professor	30	3	1	36	3	1	6	13
Bharati S. Shetty	Assistant Professor	11	2	0	21	2	2	3	17
Dr. Prashant Krishnarao Kharat	Assistant Professor	54	5	0	67	6	1	13	17
Manish Balaji Narnaware	Assistant Professor	46	2	1	58	2	1	8	12

Mayur G.Rathi	Assistant Professor	2	1	0	2	1	0	2	4
Amruta M.Khot	Assistant Professor	-	-	-	-	-	-	-	-
Abhijeet A. Urunkar	Assistant Professor	-	-	-	-	-	-	-	1
Tahseen A.Mulla	Assistant Professor	-	-	-	-	-	-	-	-

3. Ph.D. Details of Regular Degree Faculty

SN	Name of Student	Department	Name of Guide, Branch	Date of Registration/Uni	Title of the Thesis	Status: Ongoing/ Completed on
1	Dinesh Balkrishna Kulkarni	Prof. IT	Dr. P. J. Kulkarni CSE Dept	July 1999 Shivaji University	Iterated Function System for Image Coding	Completed September 2005
2	Shefali Pratap Sonavane	Asso. Prof. IT	Dr. S. M. Deshpande	01.01.2005 Shivaji University	Capacity Estimates Analysis and Design of Improved Stenographic Algorithms for Compressed Images	Completed 10.11.2010
3	Anantkumar Janardan Umbarkar	Assi. Prof. IT	Dr. M. S. Joshi CSE Dept.	June 2010 BAMU Aurangabad	Design and Analysis of Parallel Multipopulation Genetic Algorithm on Multicore System	Completed 17.06.2016
4	Ravindra Ramkishan Rathod	Assi. Prof. IT	Prof. R. D. Garg, Civil Dept	13.07.2013 IIT Roorkee	Spatial Data Mining Methods for Electricity Consumption Profiling	Completed 07.06.2017
5	Prashant Krishnarao Kharat	Assi. Prof. IT	Dr. Muralidhar Kulkarni	NIT Surathkal	Modified QUIC Protocol with Congestion Control for Improved Network Performance	Completed 1-10-2019

4. Regular Degree Faculty Ongoing Ph.D. details

SN	Name of Student	Department	Name of Guide, Branch	Date of Registration/Uni	Title of the Thesis	Status: Ongoing/ Completed on
1	Umesh Balkrishna Chavan	Asst. Prof. IT	Dr. D. B. Kulkarni	1.07.2013 Shivaji University	Performance Issues in Parallel Scalable FACIAL EXPRESSION RECOGNITION	Ongoing
2	Bharathi S. Shetty	Asst. Prof. IT	Dr.Suresha Principal, SVCE Bangalore	10/07/2017	Design an Efficient Energy Balancing Routing Algorithm for Data Communication in Wireless Sensor Networks	Ongoing
3	Amruta M. Khot	Asst. Prof. IT	Dr. B. G. Prasad	19/06/2019	RNN Based Deep Sentences Embedding for Web Document Retrieval	Ongoing

5. Ph.D. Student Details

SN	Name of Student	Name of Guide	Date of Registration	Title of the Thesis	Status: Ongoing/ Completed
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1	Medha A. Shah	Dr. D. B. Kulkarni		Design and Performance Evaluation of Parallel Scalable Event Processing System.	Completed 2019-20
2	K. V. Manwade	Dr. D. B. Kulkarni		Improving Performance of Application through Optimal Placement of Processes.	Completed 2019-20
3	Archana P. Kale	Dr. S. P. Sonavane	01/08/2015	Implementation of Neural Network based Pattern Classification by Identifying Prominent Feature Subset	Completed 2019-20
4	Sachin S.Patil	Dr. S. P. Sonavane	01/08/2015	Development of Enhanced Techniques for Handling Imbalanced Big Data Streams	Completed 2019-20
5	Arifa J. Shikalgar	Dr. S. P. Sonavane	18/07/2016	Design and Development of Deep Learning Computational Model for Dimensionality Reduction of Heterogeneous Data	Ongoing
6	Arun R. Babhulgaonkar	Dr. S. P. Sonavane	18/07/2016	Optimizing Statistical Machine Translation Using Linguistic Feature Learning	Ongoing
7	Bhushan S Yelure	Dr. S. P. Sonavane	15/07/2017	Development of an Adaptive Intersection-based Routing Protocol for Vehicular Ad-hoc Network.	Ongoing
8	Sangita B Nemade	Dr. S. P. Sonavane	15/07/2017	Semantic Image Annotation Using Deep Learning	Ongoing

6. Books Published by Faculties:

Sr. No.	Name of Faculty	Title of Book	Name of Publisher	Year of Publication
NIL	NIL	NIL	NIL	NIL

7. Patents Awarded

Title of Patent	Name of Faculty	Patent No.	Date of Award
NIL	NIL	NIL	NIL

8. Patents Filed

Title of Patent	Name of Faculty	Patent No.	Date of File
WATER SUPPLY SYSTEM FOR MULTISTORY BUILDINGS	Dr. R. R. Rathod	Ref. No./Application No.: 202121002937 dated 21 January 2021	2021
An IoT based Sytem for Security and Door Access Control	Dr. P. K. Kharat	Ref. No./Application No.: 2021100346 dated 20 January 2021	2021
Handy device and process for non-destructive identification of devgad alphonso mango and its	Dr. S. P. Sonavane	Ref. No./Application No.: 202121012895	2021

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System and Method for Facilitating Verification of Academic Certificates using Blockchain	Dr. S. P. Sonavane	Ref. No./Application No.: 202021035355	2020

9. Foreign Visits of Faculty: NIL

10. Faculty successfully completing courses from foreign universities/ NPTEL/ SWAYAM:

Sr. No.	Name of the Faculty	Title of the Course	Date of Completion	Name of University
1	A. A. Urunkar	Introduction to Research	Sep-Nov 2020	IITM
2	Dr. R. R. Rathod	Introduction to Research	Sep-Nov 2020	IITM
3	Dr. S. P. Sonavane	Introduction to Research	Sep-Nov 2020	IITM
4	B. S. Shetty	Introduction to Research	Sep-Nov 2020	IITM
5	Dr. A. J. Umbarkar	Patent Drafting for Beginners	Jan-Feb 2021	IITM
6	Dr. A. J. Umbarkar	Road map for Patent Creation	Jan-Feb 2021	IITK

11. Research Projects Completed by the faculty in the last five years: NIL

12. Ongoing Research Projects : NIL

13. Faculty Achievements in last Five Years

Name of faculty	Prize/Award received	Organization/ Institute	Year
Dr.S.P.Sonavane	50 Fabulous Edutech Leaders	World Education Congress (through Research Gate)	2019
	Honour as Academic Advisor	Nation Cyber Safety Security Standards India	2019

14. GATE Toppers (All India Rank Less Than 5000):

Sr. No.	Candidate Name	Branch	All India Rank
-	-	-	-

15. CAT Toppers (More Than 80%):

Sr. No.	Candidate Name	Branch	Percentile
-	-	-	-

16. GRE Toppers (More than 300):

Sr. No.	Candidate Name	Branch	Marks
-	-	-	-

17. FDP/Training Program/Guest Lecture organized by Faculty and Staff:

Name of Faculty	Place	Title	Date
A.M. Khot	IT Dept	One Day Online Guest Lecture on “ Python Programming “	21st November, 2020
Dr. A. J. Umbarkar	IT Dept	One Day Online Workshop On “Docker: A FOSS Virtualization Technique”	19th September, 2020

18. Guest Lecture Organized by Faculty:

Name of Faculty	Place	Subject	Date of Lecture
M. B. Narnaware	IT Dept	Expert lecture on Subject Deep Learning Topic: GAN	04/11/2020
M. B. Narnaware	IT Dept	Discrete Mathematic: Graph Theory 1	23/11/2020
M. B. Narnaware	IT Dept	Artificial Intelligence Topic Game Playing	30/11/2020
B. S. Shetty	IT Dept	Data structures	27/11/2020

19. FDPs/Conference/Workshop Attended by Faculty, Staff:

Name of faculty	Name of Event	Dates	Conducted By
Dr. A. J. Umbarkar	Patent information Course	2 weeks comprehensive online	TurnIP innovations pvt ltd.
Dr. A. J. Umbarkar	AICTE -STTP on "IT for Sustainability"	15.06.20 to 26.06.20 (Two week)	Thakur Institute of Management Studies, Career Development & Research, Mumbai
Dr. A. J. Umbarkar	Internet of Things (IoT) & It's Applications in Industry	08 to 12.06.2020 (One week)	RAIT, Nerul Navi Mumbai
Dr. A. J. Umbarkar	"Engineering Education and the Industry: A Post COVID-19 Perspective"	01.06.20 to 05.06.20 (One week)	MCT's Rajiv Gandhi Institute of Technology, Mumbai
Dr. A. J. Umbarkar	SaaS : Software as service	5-7 June 2020	CSE Dept of ADCET, Ashta
A. M. Khot	One week online STTP on “Blockchain Technologies and Use cases"	30th November to 5th December 2020	Department of Computer Engineering, Vishwakarma Institute of Information Technology, Pune
Bharati S Shetty	ICT-Level-3 Workshop on “ E-Content Development "	Saturday, 08th August 2020	Theem College of Engineering, Boisar, Maharashtra
Ms. Aditi Dilip Shinde	One week Industry – Oriented Online STTP on “Current Trends and Tools for Web Development”	21st July 2020 to 25th July 2020	Department of Computer Science and Engineering, Sri Venkateswara College of Engineering
Dr. A. J. Umbarkar	Google Go Programming	23rd to 27th June 2020	Dept. of CSE KITCOE kolhapur
Dr. RAVINDRA RATHOD	one week online Faculty Development Program on “OUTCOME BASED EDUCATION: A STEP TOWARDS EXCELLENCE”	11-15 May 2020	Government College of Engineering, Karad

Dr. Ravindra R. Rathod	five days' workshop on "ERDAS IMAGINE-2020 Remote Sensing and Image Processing Software"	24th-28th August, 2020	Computer Science and Engineering Department, Walchand College of Engineering (WCE), Sangli
Dr. Ravindra R. Rathod	short-term course on "Recent Advancements in Software Development Practices, Artificial Intelligence and Communication Technologies: Digital India Perspectives"	30-11-2020 to 04-12-2020	Department of Computer Science and Engineering, Indian Institute of Technology Roorkee.
Tahseen A. Mulla	Online FDP on "Machine Learning and Pattern Recognition"	2021-1-18 to 2021-1-22	MET's Institute of Engineering Scored 22/30
Tahseen A. Mulla	Online FDP on "AI- Machine Learning & Optimization"	2021-2-1 to 2021-2-5	Indian Institute of Information Technology Allahabad Scored 32/50
Mayur Govind Rathi	Online FDP on "Block chain"	2021-1-4 to 2021-1-8	IPS Academy, Institute of Engineering & Science, Indore
Dr. P. K. Kharat	IoT Technology Solution	14 to 18 Dec 2020	WCE, Sangli
Umesh Balkrishna Chavan	Short Term Training Program on "GPU COMPUTING"	26th to 31st October 2020	VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE
UMESH BALKRISHNA CHAVAN	"recent Trends and Application of Machine Learning and Deep Learning "	25th to 29th May 2020	Dept. of IT RAIT Navi Mumbai

20. Guest Lecture Delivered by faculty

Name of Faculty	Place	Subject	Date of Lecture
A. M. Khot	St. Jhon College of Engineering and Management Palghar MH	Software Testing	11/21/2020
Dr. A. J. Umbarkar	Sandip Foundation's Sandip Institute of Technology & Research Centre, Nashik,	Computer Science & Biology"	13th January 2021
Dr. A. J. Umbarkar	Dr. Babasaheb Ambedkar Marathwada University	Unix Internals: Security Aspects	28 th June 2021
Dr. D. B. Kulkarni	Sandip Foundation's Sandip Institute of Technology & Research Centre, Nashik,	Computer Science & Biology"	13th January 2021

21. Industrial Visits:

Place of Industrial Visit	Coordinator of Industrial Visit	Total Participants	Date of Visit
NIL	NIL	NIL	NIL

22. MoU's Signed with Industries and Institutes in last five Years: Academic

Sr.No	Organization	Area of co-operation
1	VERITAS Software Technologies India private Limited	Design and develop solutions in data protection, storage and data management domain

Industry:

23. Number of Ph.D.s Completed in Last Five Years: NIL (Information Technology)