Name:Dr. Bhakti	Nilesh Palkar	E-mail:bhak	tiraul@somaiya.edu
Contact No: 98190	069594		
Department/Section	n:Computer		
College: K J Soma	iya College of Engineering		
DOJ Somaiya:	Career Experience:20Yrs	Industry Experience:0Yrs	Teaching
1/8/2002	_	_	Experience:20Yrs
Present Academic l	Designation: Associate Professor	Present Administrative Desi	gnation: NAAC
	-	Coordinator	-

### Area of research/specialization and Courses Delivered

### Research domain/interests/areas

- 1. Image Processing
- 2. Machine Learning
- 3. Deep Learning
- 4. Data Science
- 5. Geographical Information System

### Courses Delivered

- 1. Data Science
- 2. Machine Learning
- 3. Deep Learning
- 4. Digital signal and Image Processing
- 5. Computer Vision
- 6. Image Analysis and Interpretation
- 7. Theory of Computer Science
- 8. Discrete Mathematics
- 9. Python Programming
- 10. Full Stack Python
- 11. Computer Organization and Architecture
- 12. System Programming
- 13. Computer Network
- 14. Advanced Computer Networks
- 15. Mobile Communication
- 16. Data Structures

3. Ph.D.-SVU

- 17. Analysis of Algorithms
- 18. Network Design and Management

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions			
1. UG-Mumbai University, SVU			
2. PG-Mumbai University, SVU			

Education					
Examination	Name of the	University/Board	Institute/College	Year	CPI/SPI/
	Degree				%Marks
Ph.D	Ph.D. Computer	NMIMS University	Mukesh Patel School of	2020	-
	Engineering		Technology Management		
			and Engineering		
PG	M.Tech.	Mumbai University	Thadomal Shahani	2008	76.25%
	Computer		College of Engineering		
	Engineering				

UG	B.E. Computer	Babasaheb Ambedkar	Jawaharlal Nehru College	2001	71%
	Science and	Marathwada	of Engineering		
	Engineering	University			
Diploma	Computer		Maharashtra State Board	1995	76.26%
	Engineering		Technical Education		

Research Accomplishments and Projects			
No of students pursuing Ph.D as on date:01		No of students completed Ph.D as on	
		date:Nil	
No of students completed PG thesis / Project work as on		No of students / groups completed UG	
date:07		projects as on date:40+	
Publications	Number of Peer review Journal	Number of Conference papers:	
Total:	papers:		

### **Details of Publications:**

#### **International Journals**

- 1. Bhakti Palkar, Dhirendra Mishra, "Fusion of Multi-modal Lumbar Spine Images Using Kekre's Hybrid Wavelet Transform", IET Image Processing, July 2019
- 2. Palkar, Bhakti; Mishra, Dhirendra, "Fusion of Multi Modal Lumber Spine Scans Using Wavelet and Convolutional Neural Network International Journal of Innovative Technology and Exploring Engineering (IJITEE)", Blue Eyes Intelligence Engineering & Sciences Publication, vol.8, issue 9,1704-1709,2019
- 3. Palkar Bhakti., Mishra D., "Fusion of Multimodal Lumbar Spine Images Using Kekre's Wavelet Transform", In: Perez G., Tiwari S., Trivedi M., Mishra K. (eds) Ambient Communications and Computer Systems. Advances in Intelligent Systems and Computing, vol 696. Springer, Singapore, 2018
- 4. Umang Keniya, Sarthak Kothari, Akash Mehta, Bhakti Palkar, "Laser Gesture Recognition for Human Machine Interaction", International Journal of C International Journal of Computer Sciences and Engineering, Volume-04, Issue-04, 2016
- 5. Panigrahi, Sapna; Palkar, Bhakti, "Comparative Analysis on Classification Algorithms of Auto-Insurance Fraud Detection based on Feature Selection Algorithms", International Journal of Computer Sciences and Engineering, IJCSE, Vol. 6, Issue 9,72-77,2018
- 6. Ashmi Chheda1, Janvi Beed2, Siddhi Barbhaya3 Prof. Bhakti Palkar, "A Study on Vision Based Sign Language Translation", International Journal of Computer Science and Information Technologies, Vol. 7 (2), 2016, 562-565
- 7. Dedhia, Manan; Jadhav, Amit; Jagdale, Rahul; Palkar, Bhakti, "Optimizing Airline Ticket Purchase Timing", International Journal on Recent and Innovation Trends in Computing and Communication, http://www.ijritcc.org, vol.6, issue 4,296-298,2018
- 8. Umang Keniya, Sarthak Kothari, Akash Mehta, Bhakti Palkar, "Laser Gesture Recognition for Human Machine Interaction", International Journal of Computer Sciences and Engineering, www.ijcseonline.org, vol.4, issue 4, 15-17,2016
- 9. Bhakti Palkar, Dhirendra Mishra, "Image Fusion Techniques: A Review", International Journal of Computer Applications (0975 8887) Volume 130 No.9, November 2015
- 10. Bhakti Palkar, Uday Joshi, Khushi Khanchandani, "Memory-Assisted Lossless Compression using Combination Methods", International Journal of Computer Applications (0975 8887), Volume 115 No. 18, April 2015
- 11. Bhakti Palkar, Harsh K. Malde, Darshan D. Gajara, Swapnil R. Sutar, "Hand Gesture based Game using MATLAB & Computer Vision Library", International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321 8169, Volume: 3 Issue: 2 769 771 Feb 2015
- 12. Mrs. Bhakti N. Palkar, "Colour Image Segmentation using K-means Clustering and KPE

- Vector Quantization Algorithm", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 4, Issue 1, January 2014
- 13. Dr. H. B. Kekre, Ms. Tanuja K. Sarode, Ms. Bhakti C. Raul, "Color Image Segmentation Using Vector Quantization Techniques", Advances in Engineering Science Sect. C (3), July-September 2008, PP 35-42
- 14. Dr. H. B. Kekre, Ms. Tanuja K. Sarode, Ms. Bhakti C. Raul, "Color Image Segmentation Using Kekre's Algorithm for Vector Quantization", International Journal of Computer Science Volume3, Number 4 © www.waset.org Fall 2008
- 15. Dr. H. B. Kekre, Ms. Tanuja K. Sarode, Ms. Bhakti C. Raul, "Color Image Segmentation using Vector Quantization Techniques Based on the Energy Ordering concept", TECHNIA-International Journal of Computing Science and Communication Technologies, Asia Pacific Institute of Information Technology, Panipat, India

### Conferences

- 1. Amit Mahajan, Nishit Patel, Akshay Kotak, Bhakti Palkar, "An End-To-End Approach For Automatic & Consistent Colorization of Gray-scale Videos Using Deep-Learning Techniques", International Conference on on Machine Intelligence & Data Science Applicaions, School of Computer Science, University of Petroleum and Energy Studies, Dehradun, Uttarakhand 248007. India, September 4-5, 2020, Part of the Algorithms for Intelligent Systems book series (AIS), Springer, Singapore. May 2021
- 2. Chetana Nair, Bhakti Palkar, "Twitter Analysis of Kerala Floods using Bi-Directional Encoder Representations from Transformers", 4th International Conference on Advanced Trends in Engineering, May 2020
- 3. Chetana Nair, Bhakti Palkar, "Kerala Floods: Twitter Analysis using Deep Learning Techniques", Congress on Intelligent Systems, Soft Computing Research Society, Sep 2020
- 4. Dr. H. B. Kekre, Ms. Tanuja K. Sarode, Ms. Bhakti C. Raul, "Color Image Segmentation using Kekre's Fast CodebookGeneration Algorithm Based on Energy Ordering Concept", International Conference on Advances in Computing, Communication and Control (ICAC3'09), Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai, January 23-24, 2009
- 5. Dr. H. B. Kekre, Ms. Tanuja K. Sarode, Ms. Bhakti C. Raul, "Color Image Segmentation using Vector Quantization Techniques Based on the Energy Ordering Concept",3rd International Conference On Advanced Computing & Communication Technologies, Asia Pacific Institute of Information Technology SD, Panipat 132 103, Haryana, India, November 08-09, 2008

### **Books/Book Chapters**

1. Discrete Mathematics, Technowledge Publications, 2020.

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No of Research / consultancy /	No of Research / consultancy /	No of Research / consultancy /
projects completed:0	projects on-going:1	projects on applied as on date:
Rs <u>:</u>	Rs <u>:10,95,000</u>	Rs <u>:</u>

Details of Research / consultancy / projects:

### On-going

- 1. Design and development of a physical working prototype to showcase an optimized algorithm and software for image acquisition and processing using Swarm of Autonomous UAVs (Drones) in collaboration with NESAC, ISRO
- 2. Artificial and Geo Intelligence Laboratory and its Applications, Research And Technology Development Programme, Somaiya Vidyavihar University

### Attended

- 1. Practical Machine Learning Workshop at Cere Labs Pvt. Ltd., Maharashtra India, 2018
- 2. Attended online course on "Financial Literacy" under the 'College to Corporate' programme, IIT, Bombay, 2018
- 3. Attended online course on "English for Oral Communication" under the 'College to Corporate' programme at IIT,Bombay, 2018
- 4. Attended five days STTP on "Medical Image Computing" at IIT Bombay, 2018
- 5. Attended two weeks STTP on "Recent trends and techniques in Multimedia Operating System", in June 2005 at MIT, Gwalior.

### Delivered

1. Session on Outcome Based Education for SVU faculty

Notable Key Scholastic Achievements				
1.	Best paper Award for "An End-To-End Approach For Automatic & Consistent Colorization Of			
	Gray-scale Videos Using Deep-Learning Techniques" in International Conference on Machine			
	Intelligence & Data Science Applications (MIDAS 2020), university of Petroleum and Energy			
	Studies, Dehradun on September 4-5, 2020			

	Notable Positions and Responsibility	
1.	Coordinator, NAAC, KJSCE	
2.	Member, Faculty Development Committee	
3.	Member, Result Moderation Committee	
4.	Coordinator, M.Tech. Computer Engineering	

Date: 10/2/2023 Signature of Faculty Member