

Name of Teaching Staff	:	Ruhina B. Karani	
Designation	:	Assistant Professor	
Department	:	Computer Engineering	
Date of Joining the Institution	:	05/07/2013	
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Office Contact	:	02242335000	
Google Scholar Link	:	https://scholar.google.com/citations?user=7Z4NFIAAAAJ&hl=en	
Researchgate Link:	:	https://www.researchgate.net/profile/Ruhina-Karani	
ORCID	:	https://orcid.org/0000-0002-1939-5247	
Publons Researcher ID	:	https://publons.com/researcher/4620799/ruhina-karani/	
Qualifications with Class / Grade	:	<ol style="list-style-type: none"> 1. Ph.D. (Pursuing) 2. M.E. Computer Engineering from University of Mumbai, First class with Distinction 3. B.E., Computer Engineering from University of Mumbai, First Class with Distinction 	
Total Experience in Years	:	<p>12 Years</p> <ol style="list-style-type: none"> 1. Assistant Professor, in computer engineering department of D. J. Sanghvi College of Engineering since 05/07/2013 till date. 2. Assistant Professor (Adhoc), in information technology department of D. J. Sanghvi College of Engineering From 20.7.2011 to 30.6.2013. 3. Lecturer, K.J. Somaiya College of Engineering from 5.1.2009 to 19.7.2010. 4. Lecturer (Temp.), K.J. Somaiya College of Engineering from 24.3.2008 to 26.12.2008. 5. Lecturer, K.E.S's N.N. Patil College of Engineering from 11.9.2007 to 19.3.2008. 	
Papers Published in Journal:	:	<ol style="list-style-type: none"> 1. Published a paper on "3D Visualization of Products for Online Shopping", IJCA, Vol- 132, Issue-5, December-2015. 2. Published a paper on "A survey of Image Registration Techniques using Neural Network", IJCSE, Vol-3, Issue-12, December-2015, ISSN 2347-2693. 3. Published a paper on "Face Aging Simulation", IJCA, Vol-131, Issue-11, December-2015 4. Published a paper on "Detection of Landing Areas for Unmanned Aerial Vehicles", IJCA, Vol-131, Issue-2, December-2015, ISSN 0975-8887. 5. Published a paper on "Predicting Pool Ball Trajectories" International Journal 	

	<ol style="list-style-type: none"> 6. Published a paper on “Interpretation of Indian Sign Language through Video Streaming”, International Journal 7. Published a paper on “3D Visualization of Products for Online Shopping” International Journal 8. Published a paper on “Face Aging Simulation” International Journal. 9. Published a paper on “A Survey of Image Registration Techniques Using Neural Networks” 10. Published a paper on “Detection of Landing Areas for Unmanned Aerial Vehicles” 11. Published a paper on “Real Time Eye-Tracking using Web Camera” in International Journal of Engineering Research and Technology, Volume-3, Issue 11, Nov 14 12. Published a paper on “Tracking of Entities in Multi-Sport Field”, International Conference on Advanced Computing Technologies and Applications (ICACTA- 2015), Procedia Computer Science 45 (2015) Elsevier publication, pg. 300 – 304 13. Published a paper on “2D Satellite Image Registration Using Transform Based and Correlation Based Methods” International Journal of Advanced Computer Science and Applications(IJACSA), 3(5), 2012. http://dx.doi.org/10.14569/IJACSA.2012.030511
<p>Papers Presented in Conferences</p>	<ol style="list-style-type: none"> 1. “Image Registration using Discrete Cosine Transform and Normalized Cross Correlation”, International Journal of Computer Application, Digital Library URL http://www.ijcaonline.org/proceedings/icwet2012/number2/5323-1014 (ISBN 973-93- 80864-48-5). 2. “2D Satellite Image Registration using transform based and correction based methods” International Journal of Advanced Computer Science and Applications (IJACSA), Vol.3 No. 5, PP 64-7, May 2012. 3. “A deviant transform based approach for color image registration”, IEEE Explore, October 2012. 4. “Baby Mentor: Learning Through Images” in IEEE sponsored ICIIECS’17 held on 17/03/17 - 18/03/17 6 P a g e 5. “Detection of landing areas for unmanned aerial vehicles.” 2016 International Conference on Computing Communication Control and automation (ICCUBEA) (2016): 1-5. 6. “Tracking of Entities in Multi-Sport Field”, International Conference on Advanced Computing Technologies and Applications (ICACTA- 2015), Procedia Computer Science 45 (2015) Elsevier publication, pg. 300 – 304 7. “Deep Learning for Detection and Severity Classification of Dibetic Retinopathy”, 1st International Conference on Innovations in Information and Communication Technology (ICIICT 2019), IEEE Conference

	<p>Record No:46602, ISBN No:978-1-7281-1603-7 at St. Peter's College of Engineering and Technology, Avadi, Tamilnadu, India on 25th April 2019</p> <p>8. “Optimization of Rainwater Harvesting Sites using GIS” 5th International Conference on Geographical Information Systems Theory, Applications and Management (GISTAM 2019) at University of Crete, Heraklion, Crete-Greece on 4th May 2019.</p> <p>9. Published a paper on “Generation of Indian sign language by sentence processing and generative adversarial networks”, 3rd International Conference on Intelligent Sustainable Systems, ICISS 2020, 2020, pp. 1250–1255, 9315979</p> <p>10. Published a paper on “Pothole Detection and Dimension Estimation System using Deep Learning (YOLO) and Image Processing”, International Conference Image and Vision Computing New Zealand, 2020, 2020-November, 9290547</p> <p>11. Published a paper on “English Language Accent Classification and Conversion using Machine Learning” (May 14, 2020). Proceedings of the International Conference on Innovative Computing & Communications (ICICC) 2020, SSRN, Elsevier, Available at SRN: https://ssrn.com/abstract=3600748 or http://dx.doi.org/10.2139/ssrn.3600748</p>
Area of Specialization	Machine Learning, Image Processing and Computer Vision
PhD Guide ? Give field & University	: Field: N/A University:
PhDs / Projects Guided	: PhDs : N/A Projects at Masters level:
Books Published / IPRs / Patents	: Books (Editors for conference Proceedings on Springer) <ul style="list-style-type: none"> 1. Published a book chapter on “Applications of Machine Learning in Psychology and the Lifestyle Disease Diabetes Mellitus” in Book “Design of Intelligent Applications Using Machine Learning and Deep Learning Techniques” 1st Edition, Chapman and Hall/CRC ,ISBN9781003133681,2021 2. Published a book chapter on “ Combating COVID-19 using object detection techniques for next generation autonomous systems” in Book “Cyber Physical Systems” Ai and COVID-19, Academic Press, Elsevier, https://doi.org/10.1016/B978-0-12-824557-6.00007-8 3. Registered a copyright for " Classification of Facial Expression using CNN", registration no- L104141/2021
Professional Memberships	: ISTE-LM

Grants fetched	: Minor Research Grant (University of Mumbai)	1. Received minor research grant from University of Mumbai for conducting research on “Optimal Harvesting of Rainwater using Simulation based on GIS and Weather Modeling Systems”.
Interaction with Professional Institutions	: Guest Lectures: Other Achievements and Responsibilities:	<ol style="list-style-type: none"> 1. Organized AICTE-ISTE Sponsored One week Short Term Training Program entitled, “Insightsof Machine Learning and Deep Learning “from 2nd July 2018 to 6th July 2018 2. Organized One week Faculty Development Program entitled, “R and Python Programming" from 16th July 2018 to 20th July 2018 3. Organized Expert Session on “Imparting Social values and Ethics to Students" 4. Organized an International conference on “Advanced Computing Technologies and Applications (ICACTA-2015)” held in D.J.Sanghvi College of Engineering 5. Organized a national conference on “Emerging Trends in Computers, Communication and Information Technology held in K.J.Somaiya College of Engineering , Mumbai. 6. Organized a State Level Project Competition “ DJ ASCII” for Computer and Information Technology Department of D. J. Sanghvi College of Engineering 7. Contributed as a teacher In 2 Week ISTE Workshop on Effective teaching/Learning of computer programming conducted by IIT Bombay under the National Mission on Education through ICT. 8. Conducted expert lecture on “Digital Signal and Image processing” 9. Conducted expert lecture on “Database management systems”
Subjects Taught	<p><u>UG Level:</u></p> <ul style="list-style-type: none"> • Machine Learning • Digital Signal and Image Processing • Human Machine Interaction • Natural Language Processing • Database Management System • Operating Systems • Software Architecture <p><u>PG Level:</u></p>	

Projects Guided	: <u>UG Level: 25+</u> <u>PG Level:</u>																						
Recommended Students for Higher Education	<table border="1"> <thead> <tr> <th data-bbox="446 551 699 1016"><u>Name of the Student</u></th> <th data-bbox="699 551 1501 1016"><u>University/Industry</u></th> </tr> </thead> <tbody> <tr> <td></td> <td>University of Southern California</td> </tr> <tr> <td></td> <td>University of California, Irvine</td> </tr> <tr> <td></td> <td>University of California, San Diego</td> </tr> <tr> <td></td> <td>Purdue University</td> </tr> <tr> <td></td> <td>University of California, Santa Barbara</td> </tr> <tr> <td></td> <td>University of Texas, Dallas</td> </tr> <tr> <td></td> <td>University of Illinois, Chicago</td> </tr> <tr> <td></td> <td>University of Minnesota, Twin Cities</td> </tr> <tr> <td></td> <td>University of North Carolina, Charlotte</td> </tr> <tr> <td></td> <td>University of Georgia</td> </tr> </tbody> </table>	<u>Name of the Student</u>	<u>University/Industry</u>		University of Southern California		University of California, Irvine		University of California, San Diego		Purdue University		University of California, Santa Barbara		University of Texas, Dallas		University of Illinois, Chicago		University of Minnesota, Twin Cities		University of North Carolina, Charlotte		University of Georgia
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Institute/Department Responsibility handled:	<ol style="list-style-type: none"> 1. Website Coordinator 2. Examination Coordinator 3. Project Coordinator 4. Member of Board of Studies 5. Member of Department Advisory Board 6. Alumni Coordinator 7. F.E. Mentor 8. Member of NBA Committee 9. Member of NAAC Committee 10. Member of admission Committee 11. Class-Incharge 12. 																						
Pedagogy Development	<ol style="list-style-type: none"> 1. Designed Machine Learning (Sem VI) syllabus under autonomy 2. Designed Deep Learning(Sem VIII) syllabus under autonomy 3. Designed Operating Systems (Sem IV) syllabus under autonomy 4. Designed Digital Signal Processing and Application (Sem VII) syllabus under autonomy 5. Designed Digital Signal and Image Processing (Sem VII) syllabus for University of Mumbai 6. Designed Database Management Systems syllabus for University of Mumbai 																						