Name of Faculty	Dr. Avani R. Vasant
Designation	Professor and Head of the Department
Email id	avanivasant.ce@bitseducampus.ac.in
Contact number	0265-2303991 Ext: (976)
Total Experience	22 years 8 months
Teaching Industry	Teaching- 22 Years and 8 Months (ex. 6 Y 5 M) ---
Professional Summary	- Professor and Head of Computer Science and Engineering Department, Babaria Institute of Technology, Vadodara since May 2015. - PhD in Computer Science and Engineering with 22 years of academic experience - Worked as a Lecturer in I.T. at C.U. Shah College of Engg. & Technology from July 1999 to September 2000 - Worked as a Founder Head of IT & CE department at V.V.P. Engineering College Rajkot from September 2000 to April 2015 (at lecturer, senior lecturer, assistant professor and associate professor level) - Worked as a Chairman Board of Studies, Information Technology Engineering at Saurashtra University during the year 2002 to 2010 - Played a Key Role in developing various Computer Labs for B.E. I.T. & B.E. C.E. during Year 2000 to 2015. - Worked as a Coordinator for GTU practical Examination during the year 2008 to 2015 - Worked as a member of GTU Academic Inspection Committee and GTU Interview Panel member. - Worked as a organizing member for various technical state and national level events, international conferences, STTP and FDP - Worked as a reviewer, Editorial board member and conference chair - Taught 15+ courses at undergraduate and postgraduate levels - Published more than 20 research papers in peer reviewed journals and conferences - Guided 50+ undergraduate level Projects - Guided 3 postgraduate Students for their Master of Engineering thesis work - Research Guide & Co-Supervisor at C.U. Shah University (2014-2019) - Life Member of ISTE and nominated member of CSI
Current Activities	- Professor and Head of Computer Science and Engineering Department, Babaria Institute of Technology, Vadodara - Research Guide & Co-Supervisor at C.U. Shah University (2014-2019) - Convener - BIT AI Club for "AI and Deep Learning Skilling and Research Project" an initiative by leadingindia.ai and our college is a zonal partner for this project - College SPOC for State level and National level Hackathon - Convener of Website Committee BITS Edu Campus - Convener RFID Data Management Team
Specialization Areas	- AI & Machine learning - Deep learning - Artificial Neural Networks - Pattern Recognition and Classification - Natural Language Processing - Image Processing - Data Analytics
Subject Taught (UG/PG)	**UG Level** - Database Management Systems - Distributed Database Application and Systems

	➢ Client Server Development (Oracle) ➢ Data Structures & Algorithms ➢ Operating System ➢ Computer Graphics ➢ Soft Computing ➢ Compiler Design ➢ Dot net Technology with C# ➢ Web Technology ➢ Object Oriented Concepts and Programming ➢ Object Oriented Programming with C++ ➢ Computer Programming with C ➢ Computer Fundamentals ➢ Programming for Problem Solving ➢ Data and File Structures ➢ Seminars and Industrial Projects **PG Level** ➢ Design of Language Processors ➢ Advance Databases ➢ Advance Computer Graphics ➢ Guidance for Dissertation Work
Qualifications	PhD (Computer Science and Engineering) (2013), Singhania University M.E. (Computer Engineering) (2006), Birla Vishvakarma Mahavidyalaya, S.P. University, Vallabh Vidyanagar B.E. (Computer Engineering) (1997), Birla Vishvakarma Mahavidyalaya, S.P. University, Vallabh Vidyanagar
Skills	Usage of Modern ICT Tools, Data Analytics tools, Programming languages, Database Design, Algorithm Optimization, Problem Analysis, Design and Solving
Achievements	➢ Nominated by BITS Management to attend Summer Training Program at Carleton University, Canada from 21st June 2018 to 19th July 2018 ➢ Received certificate of appreciation by Canada-India Centre for promoting and supporting partnership between Canada India Centre, Carleton University and BITS Edu Campus,2018 ➢ Received "Distinguished Institution Award at TechNext-2017- Awards to Academia" organized by CSI Mumbai Chapter and IIT Bombay for various CSI activities in CSE Department ➢ Research paper Selected as the Best Paper for the Conference Session and Secured Second Rank at ICISET-2011, Rajkot. ➢ Research Paper Selected among Best Three Papers at National Conference on Information and Communication Technology (NCICT), Ahmadabad, March 2005.
Research Project	➢ As a Zonal partner undertaken research project in BIT AI Club for "AI and Deep Learning Skilling and Research Project" an initiative by leadingindia.ai
Publications	**International Journal Papers** 1. Darshana Patel, Dr.Saurabh Shah, Dr.AvaniVasant. "Technique for optimizing of association rule mining by utilizing genetic algorithm" has been accepted for publication in "Recent Patents on Computer Science" Scopus Indexed Journal, August-2019. 2213-2759 12-1 2. Darshana Patel, Dr.Saurabh Shah, Dr.AvaniVasant. "Privacy Preserving Data Publishing Through Anonymization". Journal of Emerging Technologies and Innovative Research (ISSN: 2349-5162) UGC Approved, January-2019. 6-1 447-456 (5.87 Impact Factor) 3. Darshana Patel, Dr.Saurabh Shah, Dr.AvaniVasant. "A Comprehensive Review and Efficient Implementation of Privacy-Preserving Associative Classification". Journal on Information Technology (ISSN: 2277-5110) Vol 7 No.3, pg 45-53, UGC Approved, August-2018. 4. Darshana Patel, Dr.Saurabh Shah, Dr.AvaniVasant. "Privacy Preservation of Class Association Rules and its Optimization by Utilizing Genetic Algorithm" International Journal

of Engineering &Technology, 7 (4) (2018) 6862-6865, Scopus Indexed Journal, December-2018. 7 (4) 6862-6865

5. Darshana Patel, Dr.AvaniVasant. "A Comprehensive Review of Privacy-Preserving Associative Classification". International Conference on Communication, Security and Optimization of DSS-Mumbai, February-2018.

6. Vishal Batvia, Drashti Patel, Dr. Avani R. Vasant, "A Survey on Ayurvedic Medicine Classification using Tensor flow", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, Volume 53 Number 2 November 2017, Pg 68-70

7. S.Vasant, A Vasant et al., "Optimization of Graph Coloring Problem using Hybrid Selection: A Genetic Algorithm Approach", international research journal of Science, Technology & Management " Vision & Quest", ISSN: 0975-8410, Jan-July, 2014, pg. 77-83

8. R.P.Parikh and A.Vasant, "Table of Content detection using machine learning:Proposed System", International Journal of Artificial Intelligence & Application, Volume 4, No.3, May-2013

9. A Vasant, Dr. G.R.Kulkarni "Preprocessing Steps for the Recognition of Handwritten Gujarati Characters", CiiT International Journal of Digital Image Processing, DOI: DIP092012003, Print: ISSN 0974 – 9691 pg No. 839-843 & Online: ISSN 0974 – 9586, September 2012

10. A Vasant, Dr. G.R.Kulkarni "Comparison of DCT-DWT based feature extraction methods for Handwritten Gujarati Character Recognition", International Journal of Computer And Electronics Engineering, ISSN:0975-4202 page No. 471-474, Jul-Dec 2012

11. R.P. Parikh and A. Vasant, "Various techniques for table of contents detection : A Review", International Journal of Scientific Computing, Volume 6,No.2, July-Dec, 2012

12. S.Vasant, A Vasant et al., "Equitble Payment Distribution for Project-Expert Scheduling using Genetic Algorithm", CiiT International Journal of Artificial Intelligent System and Machine Learning, Vol.4, No.12, ISSN: 0974-9667, Page No. 682-687, December-2012

International Conference Papers

13. D.H.Patel, R.N.Kotecha, Dr. A.R.Vasant, "Associative Classification: A Comprehensive Analysis and Empirical Evaluation", NUiCONE –November-2017, 978-1-5386-1747-2/17/$31.00 ©2017 IEEE

14. Chintan Sidpara, Darshana Patel, Kunal Khimani, Darshan Upadhyay, Avani Vasant, "Analysing Distribution of Copyrighted Files by Tracking BitTorrent Network", World Conference On World Conference On Smart Trends In Systems, Security And Sustainability (Ws4 2017) In Concurrent With World Eminence Awards For Systems, Security And Sustainability-February-2017

15. K. Vora, A. Vasant, R. Adhvaryu, "Named entity recognition and classification for Gujarati language", International Conference on Advances in Computing, Communications and Informatics (ICACCI), Nov-2016, pg no.2295-2298

16. S. DasGupta, A. Vasant, "A Hybrid Named Entity Recognition System using Natural Language Processing & Decision Tree Learning", International Conference on Information, Knowledge & Research in Engineering, Technology & Sciences-April 2013, G.K.Bharad Engg. College.

17. A Vasant, Dr. G.R.Kulkarni "Performance Evaluation of Different Image Sizes for Recognizing Offline Handwritten Gujarati Digits using Neural Network Approach", 2012 IEEE International Conference on Communication Systems and Network Technologies-CSNT2012, ISBN: 978-0-7695-4692-6, pp.270-273, published in IEEExplore DOI Bookmark: http://doi.ieeecomputersociety.org/ 10.1109/CSNT.2012.66

18. S Vasant, A Vasant, NN Jani "A Novel Proposed Approach for an Equitable Payment Distribution Using Genetic Algorithm", 2012 IEEE International Conference on Communication Systems and Network Technologies-CSNT2012, 978-0-7695-4692-6/12 $26.00 © 2012 IEEE, DOI 10.1109/CSNT.2012.141

19. A Vasant, Dr. G.R.Kulkarni "Gujarati Character Recognition: The state of the art comprehensive survey", International Conference on Information, Knowledge & Research in Engineering, Technology & Sciences-2012, G.K.Bharad Engg. College, Rajkot.

20. A Vasant, Dr. G.R.Kulkarni "Simulation and Modeling of Handwritten Gujarati Digits using Neural Network Approach", 2011 IEEE International Conference on Computational Intelligence and Computing Research, Kanyakumari. ISBN:978-1-61284-766-5, pp-476-479.

21. A Vasant, Dr. G.R.Kulkarni "Gujarati Digit Recognition using neural networks", International Conference on innovative science and engineering technology (ICISET-2011), V.V.P. Enginering College Rajkot, April-2011, ISBN:978-81-906377-5-6, pg no 419-421. **Selected as the Best Paper for the Conference Session and Secured Second Rank.**

	National Conference Papers
	22. A Vasant, T Patalia and M Titiya. "Knapsack Problem using Genetic Algorithm", National Conference on Information and Communication Technology (NCICT), Ahmedabad, March 2005. **Selected among Best Three Papers.**
	23. H Dhadhal, K Vadhar and A Vasant. "Data Mining and Warehousing", National Seminar on Applied Computing and Communication Technologies (TELE-TECH), Rajkot, June 2005.
	24. A Vasant, H Dhadhal and K Vadhar. "Traveling Salesman Problem using Genetic Algorithm", National Conference on Emerging Technologies Applications (ETA), Rajkot, October 2005.
	25. A Vasant, and M Mendapara. "Weight Determination of Back propagation Network using Genetic Algorithm". In National Conference on Emerging Technologies Applications (ETA), Rajkot, October 2006. **Secured Second Rank in Presentation**
	26. T Patalia, A Vasant, and M Titiya. Optical Communication Networking In National Conference on Information and Communication Technology (NCICT), Ahmedabad, March 2005.
	27. M Titiya, T Patalia and A Vasant, and. Management Information Systems In National Conference on Information and Communication Technology (NCICT), Ahmedabad, March 2005.
Activities and honours	➢ Participated in Three weeks 8 credit course on "WhatApp Outcome Based Education Faculty Development Program" March 24th to April 14th, 2020
	➢ Participated in "One Day Workshop on C and C++" held at Babaria Institute of Technology, Vadodara, on 29th February 2020, organised by BIT-IIT Bombay Remote Centre
	➢ Participated in "One Day Workshop on Arduino" held at Babaria Institute of Technology, Vadodara, on 8th February 2020, organised by BIT-IIT Bombay Remote Centre
	➢ Guided a project on problem title - Biometric Finger Print Scanner short listed for final round, Gujarat Industrial Hackathon 2019
	➢ Attended Summer Training Program on "Data Analytics" at **Carleton University, Canada** from 21st June 2018 to 19th July 2018
	➢ Participated in "One day Workshop on R" held at Babaria Institute of Technology, Vadodara, on 9th November 2019, organised by BIT-IIT Bombay Remote Centre
	➢ Attended Workshop on "AI and Deep Learning" at Marwadi University, Rajkot from June 1-3, 2018
	➢ Attended TechNext-2017, Academic Conference (on Machine Learning) and Academia Awards, Symbiosis of Academicians and IT Industry at IIT Bombay, January-2017.
	➢ Guided under graduate project "Machine Learning For Health Care" selected for final jury round for Dewang Mehta IT Awards 2017 (Got selected in top best 11 projects)
	➢ Worked as a Program committee member of ComNet-2015-International Conference on Communication and Network-2015, "Issues and Challenges with IOT revolution"
	➢ Participated in IEEE Xplore Digital Library Awareness Workshop held at BIT, Vadodara on 7th August, 2015
	➢ Worked as a coordinator of GTU practical Examination for. Zone-4 for various B.E. (I.T.) Exams (1st , 2nd ,7th and 8th semester), 2011 to 2015
	➢ Guided undergraduate project Restaurant Ordering System using Tablets (Won 2nd Prize in Project Fair), 2014
	➢ As a Convener organized an STTP on "Emerging Trends in Cloud Computing and Advance Networking" from 20th December-24th December, 2014
	➢ As a Convener organized an STTP on "Research Trends on Data Mining and Image Processing" from 9th August-13th August, 2013.
	➢ Guided undergraduate project Smart School Application (Bus Tracking System and Digital Diary) (Won 3rd Prize in Project Fair), 2013
	➢ Worked as a Convener in National Level Technical Symposium VVP TECHNOFEST-2013 held on March 16, 2013
	➢ Served as an Expert Panel member for GTU interviews held at Atmiya Institute of Technology and Science, 2013-14.
	➢ Worked as an Organizing Chair in International Conference VVP ITES-2012 held on Dec 22-23, 2012
	➢ Served as a Session Chair in IEEE International Conference on Communication Systems and Network Technologies, 2012
	➢ Organized a one day State Level Seminar on "Image Processing" sponsored by GUJCOST at VVP Engineering College, 2011.

	➢ Served as an Expert Panel member for GTU interviews held at Om Shanti Engineering College, 2011. ➢ Organized a State Level Seminar for students on "Ethical Hacking" by Ankit Fadia, February, 2009 ➢ Organized a State Level Seminar for students on "Cyber Security" by Sunny Vaghela, September, 2009 ➢ Serving as an External Reviewer & Examiner for M.E. Dissertations at GTU since 2008 ➢ Worked as a member of Organizing Committee in National Conference on Emerging Technologies and Applications, ETA-2006 held at Saurashtra University, Rajkot, 2006
Grant Received	➢ 10000/- Rs. for Organizing a one day State Level Seminar on "Image Processing" sponsored by GUJCOST at VVP Engineering College, 2011