Curriculum Vitae of Prof. V. B. Ghute

Name : Dr. Vikas Bhaurao Ghute

Date of Birth: September 09, 1964.

Present Position: Professor and Director, School of Computational Sciences

Head, Department of Statistics

Solapur University, Solapur, PIN: 413 255, India.

Contact Details: Office: 0217-2744771 (Ext. 301) Cell: +91 9881372729

E-mail ID: vbghute_stats@rediffmail.com and vbghute@sus.ac.in

Educational Qualifications

B.Sc. (Statistics) : 1985, Shivaji University, Kolhapur.

B.Sc. (Mathematics): 1986, Shivaji University, Kolhapur.

M.Sc. (Statistics) : 1988, Shivaji University, Kolhapur.

Ph.D. (Statistics) : 2008, Shivaji University, Kolhapur.

Title of Thesis : Some Contributions to Multivariate Statistical Process Control.

Teaching Experience (UG and PG 30 Years)

One year at Dr. Bapuji Salunkhe College, Miraj, Dist. Sangli (Aug. 1988-July 89).

- Nineteen years (Aug.1989 to Dec. 2008) in Rayat Shikshan Sanstha's A. S. C. College, Ramanandnagar Dist. Sangli, Dahiwadi College, Dahiwadi Dist. Satara, A. S. C. College, Pusegaon Dist. Satara and Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur Dist. Solapur
- ➤ From 01 Jan. 2009 to till today at Solapur University, Solapur.

> Administrative Experience

- 1. Director, School of Computational Sciences (From 10 July 2018).
- 2. Director, Knowledge Resource Center, Solapur University Library from Oct. 2016 (Additional charge).
- 3. In-charge Director, School of Computational Sciences (2009-2015).
- 4. In-charge Head, Department of Statistics (2009-2012).
- 5. In-charge Head, Department of Mathematics (2012).
- 6. Head, Department of Statistics (2012 to till date).
- 7. Head, Department of Mathematics (From August 2017 to March 2018).
- 8. Contact Person, of Solapur University for SET Examination conducted by S. P. Pune University Pune (From Feb. 2017).

Experience with Universities

- ➤ Member of Senate and Management Council of Solapur University, Solapur (2014-15).
- Member of Ethical Committee at Pandit Deendayal Upadhyay Dental College, Solapur.
- Chairman of Ad-hoc Board of Studies in Statistics (2011-14) and (2018 onwards), Member of Board of College and University Development Committee (2017), Research and Recognition Committee, Board of University Teaching and Research, Board of Studies in Statistics, Departmental Research Committee of Solapur University, Solapur.
- Member of Board of Studies in Business Economics, Banking, Mathematics and Statistics (2000-2005) of Shivaji University, Kolhapur, Board of Studies in Statistics of SRT



Marathwada University, Nanded, Board of Studies in Business Statistics and Business Mathematics of D. G. College of Commerce, Satara (Autonomous College), Board of Studies in Statistics of Y. C. Institute of Science, Satara (Autonomous College), Vivekanand College, Kolhapur(Autonomous College), Board of studies in Statistics, Shivaji University, Kolhapur.

University Representative on Board of Management of Community College running under UGC scheme at Shri Shivaji Mahavidyalaya, Barshi Dist. Solapur.

Important Committees of University

Chairman of PG Entrance committee, Member of Purchase Committee (2010-12), Library Committee (2011-15), Committee for allocation of funds for holding Seminars/ Conferences, Scrutiny Committee, Academic and Administrative Audit Committee, Local inquiry committee several times, Member of the Selection Committee at university level and college level, Member on selection committees for teaching posts in other universities (Shivaji University, Kolhapur, SRTM University, Nanded, Dr. BAM University, Aurangabad) on few occasions.

Awards

> Received Dewang Mehta National Education Award as "Best Professor in Department of Statistics" in November 2017.

Association with Policy Bodies

- ➤ Meeting with chairman of Fourth Finance Commission of Maharashtra on 22 September 2014 at Mumbai.
- ➤ Special Invitee for District Level Meeting of Sixth Economic Census (10 October 2013) at Solapur.
- Attended one week "Training of Trainers Programme (TOT) on Official Statistics" conducted for HODs of Statistics Department of Indian Universities organized by National Statistical Systems Training Academy (NSSTA), Ministry of Statistics and Programme Implementation, Govt. of India, held at Greater Noida during 24-28 October 2016.
- Attended the RUSA workshop at R. T. M. Nagpur University, Nagpur on 23 Feb. 2018.
- ➤ Participated in the Third Regional Workshop (Western Region) under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) Organized by MHRD, Govt. of India in association with Indian Institute of Science Education and Research (IISER) Pune on 13 Apr. 2018.

Editorial and Review Work

- > Member of Editorial Board of Avishkar- Solapur University Research Journal.
- External Referee for examining Ph.D. Thesis of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, Shivaji University, Kolhapur, SRTM University, Nanded, Kakatiya University, Warangal, Osmania University, Hyderabad.

> Reviewer of Research Journals

- 1. Communications in Statistics-Simulation and Computation.
- 2. Computers and Industrial Engineering.
- 3. Applied Mathematics and Information Sciences.
- 4. Journal of Modern Applied Statistical Methods.
- 5. Communications in Statistics-Theory and Methods.
- 6. Quality and Reliability Engineering International

➤ Judge for Avishkar-University Level Research Festival (2013, 2014, 2015).

Important Academic Events Organized

- 1. Convener, *National Workshop on Statistical Computing*, 19-21, September, 2013 sponsored by Council of Scientific and Industrial Research (CSIR) New Delhi at Solapur University, Solapur.
- 2. Convener, *National Conference on New Horizons of Statistics*, 21-23 October, 2013 sponsored by Department of Science and Technology (DST), New Delhi, at Solapur University, Solapur.
- 3. Convener, *National Seminar on Fuzzy Mathematics and Its Applications*, 28 February, 2015 at Solapur University, Solapur.
- 4. Convener, *National Seminar on Creating Awareness about Official Statistics*, 09 January 2017 sponsored by National Statistical Systems Training Academy(NSSTA), Ministry of Statistics and Programme Implementation, Government of India at Solapur University Solapur.

Leadership and Membership of Professional Bodies/ Association

- 1. Life Member: International Indian Statistical Association (IISA).
- 2. Life Member: Indian Society for Probability and Statistics (ISPS).
- 3. Life Member: Shivaji University Statistics Teachers' Association (SUSTA).
- 4. Vice President: Shivaji University Statistics Teachers' Association (2015-2018).

Training and Orientation

- ➤ Completed the Orientation Course during 06 April to 02 May 1993 at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- ➤ Completed Refresher Course during 01-28 March 1993 at Shivaji University, Kolhapur.
- ➤ Completed Refresher Course during 31 October to 27 November 1995 at S. P. Pune University, Pune.
- ➤ Completed Refresher Course during 8-29 October 2002 at Shivaji University, Kolhapur.
- ➤ Attended "A 12-days Course in C-Language for College Teachers" during 23 June-04 July 1998 at Shivaji University, Kolhapur.

Research Projects

Nonparametric Quality Control Techniques, University Grants Commission, New Delhi (2012-14).

Areas of Special Interest

Industrial Statistics, Statistical Computing, Statistical Inference, Regression Analysis.

Courses Taught at PG Level

Distribution Theory, Estimation Theory, Probability Theory, Theory of Testing of Hypotheses, Sampling Theory, Asymptotic Inference, Multivariate Analysis, Regression Analysis, Industrial Statistics, Reliability and Survival Analysis.

Research Guidance

M.Sc. Projects: 04 to 05 students every year, since 2012.

M. Phil. Students (Degree Awarded): 01

➤ Trupti S. Zaware (2010), "Hotelling's T² Control Chart".

Ph. D. Students (Degree Awarded): 03

- Digambar M. Zombade (2015), "Nonparametric Quality Control Techniques".
- > Shobha V. Rajmanya (2017), "Process Variability Control Procedures".
- ➤ Sharad M. Nimbale (2017), "On Artificial Neural Network Approach for Statistical Process Control".

Ph. D. Students (Thesis Submitted): 01

Pramod M. Dargopatil (2018), "On Autocorrelated Statistical Process Control".

Ph. D. Students (Working)

- ➤ Mahesh M. Deshpande, "Some Contributions to Process Capability Analysis" (Reg. in 2017).
- ➤ Rupali A. Kapase "A Change-Point Approach for Statistical Process Control" (Reg. in 2017).
- ➤ Vijaykumar K. Ghadage "An Alternative Control Charting Approach to Statistical Process Control and Monitoring" (Reg. in 2017).
- ➤ Shital K. Gadekar, "Regression based Statistical Process Control" (Reg. in 2017).
- ➤ Yogesh G. Raut, "Some Contributions to Statistical Aspects of Designs and Analysis of Clinical Trials" (Reg. in 2018)

Research Publications

International Journals

- 1. Ghute V. B. and Shirke D. T. (2007). Joint monitoring of multivariate process using synthetic control charts, *International Journal of Statistics and Management Systems*, Vol.2, No. (1-2), pp.129-141.
- 2. Ghute V. B. and Shirke D. T. (2008). A multivariate synthetic control chart for process dispersion, *Quality Technology and Quantitative Management*, Vol.5, No.3, pp. 271-288.
- 3. Ghute V. B. and Shirke D. T. (2008). A multivariate synthetic control chart for monitoring process mean vector, *Communications in Statistics-Theory and Methods,* Vol. 37, No. 13, pp. 2136-2148.
- 4. Ghute V. B. and Shirke D. T. (2008). A synthetic T² chart with adaptive sample sizes, *IAPQR Transactions*, Vol. 33, No. 2, pp. 95-107.
- 5. Ghute V. B. and Shirke D. T. (2012). A nonparametric signed-rank control chart for bivariate process location, *Quality Technology and Quantitative Management*, Vol. 9, No.4, pp. 317-328.
- 6. Ghute V. B. and Shirke D. T. (2012). Bivariate nonparametric synthetic control chart based on sign test, *Journal of Industrial and Systems Engineering*, Vol.6, No.2, pp.108-121.
- 7. Ghute V. B. and Shirke D. T. (2013). Multivariate moving average control chart for process variability, *International Journal of Statistics and Analysis*, Vol.3, No.2, pp.97-104.
- 8. Rajmanya S. V. and Ghute V. B. (2013). Synthetic D chart under non-normality, *International Journal of Engineering Research and Technology*, Vol. 2, No.1, pp.2002-2010.

- 9. Rajmanya S. V. and Ghute V. B. (2014). A Synthetic control chart for monitoring process variability, *Quality and Reliability Engineering International*, Vol.30, pp. 1301-1309.
- 10. Ghute V. B. and Shirke D. T. (2014). Effect of non-normality on multivariate synthetic |S| control chart, *International Journal of Agricultural and Statistical Sciences*, Vol. 10 No. 1, pp. 93-99.
- 11. Zombade D. M. and Ghute V. B. (2014). Nonparametric control charts for monitoring process variability, *International Journal of Engineering Research and Technology*, Vol. 3, No. 5, pp. 2358-2362.
- 12. Ghute V. B. and Rajmanya S. V. (2014). Moving average control charts for process dispersion, *International Journal of Science, Engineering and Technology Research*, Vol. 3, No. 7, pp. 1904-1909.
- 13. Zombade D. M. and Ghute V. B. (2014). Nonparametric control charts for variability using runs rules, *The Experiment-International Journal of Science and Technology,* Vol. 24, No. 4, pp. 1683-1691.
- 14. Nimbale S. M. and Ghute V. B. (2015). Artificial Neural Network Model for Monitoring the Fraction Nonconforming Control Chart, *International Journal of Science and Research*, Vol. 4 No.3. pp. 188-190.
- 15. Nimbale S. M. and Ghute V. B. (2016). A Neural Network based Individual Control Chart, *International Journal of Engineering Research and Technology*, Vol. 5 No.5. pp. 24-27.
- 16. Dargopatil, P. M. and Ghute, V. B. (2017). Effect of autocorrelation on the performance of the S chart, *International Journal of Agricultural and Statistical Sciences*, 13(2), 465-472.
- 17. Zombade D. M. and Ghute V. B. (2018). Shewhart-type nonparametric control chart for process location, *Communications in Statistics-Theory and Methods*, Published online on 26-02-2018. https://doi.org/10.1080/03610926.2018.1435811.
- 18. Dargopatil, P. M. and Ghute, V. B. (2018). New sampling strategies to reduce the effect of autocorrelation on the synthetic T² chart to monitor bivariate process, *Quality and Reliability Engineering International*, (In press).
- 19. Kapase R. A. and Ghute, V. B. (2018). Estimating the period of a step change in single observation data, *International Journal of Agricultural and Statistical Sciences* (In press).

National / Regional Journals

- 1. Ghute V. B. and Shirke D. T. (2007). Robustness of multivariate synthetic control chart to non-normality", *Trajectory*, Vol.15, No. 1, pp.35-49.
- 2. Ghute V. B. (2013). Non-parametric CUSUM control charts, *CRITIC*, Vol.2, No.1, pp.131-136.
- 3. Ghute V. B. (2013). Non-parametric control chart for process location, *Contemporary Research in India*, Vol. 3, No.2, pp. 276-280.
- 4. Ghute V. B. (2013). Distribution-free control chart for bivariate process, *Journal of Academia and Industrial Research*, Vol.1, No.11, pp.703-705.
- 5. Ghute V. B. and Shirke D. T. (2013). A multivariate moving average control chart for mean vector, *Journal of Academia and Industrial Research*, Vol.1, No.12, pp.795-800.
- 6. Zombade D. M. and Ghute V. B. (2014). Nonparametric CUSUM charts for process variability, *Journal of Academia and Industrial Research*, Vol. 3, No. 1, pp. 53-57.

- 7. Rajmanya, S. V. and Ghute V. B. (2015). A new chart for monitoring variability of bivariate processes, *Contemporary Research in India*, Special Issue, pp.260-263.
- 8. Dargopatil, P. M. and Ghute, V. B. (2018). Performance analysis of synthetic R chart for autocorrelated process, *Assam Statistical Review-A Research Journal of Statistics* (In press).

Full Paper in Conference Proceedings

- 1. Ghute V. B. and Shirke D. T. (2011). A bivariate nonparametric synthetic control chart for monitoring process location, *Proceedings of the International Congress on Productivity, Quality, Reliability, Optimization and Modeling*, Vol.1, pp.648-661.
- 2. Rajmanya, S. V. and Ghute V. B. (2015). CUSUM control chart for monitoring process variability, *Proceeding of National Seminar on Recent Developments in Applied Statistics*, pp. 159-166.
- 3. Ghute V. B. and Rajmanya, S. V. (2016). An efficient monitoring of process variability, *Proceedings of State Level Seminar on Recent Trends in Industrial Statistics*, pp.27-39.
- 4. Rajmanya, S. V. and Ghute V. B. (2016). Auxiliary Information based Synthetic Chart for Process Variability, *Proceedings of State Level Seminar on Recent Trends in Industrial Statistics*, pp.40-49.

Papers Presented in Conferences/Seminars

International Conferences

- 1. Ghute V. B.* and Shirke D. T. (2007). "Nonparametric synthetic control charts for bivariate process location", *International Conference on Statistical Science, OR and IT* organized by Dravidian University, Kuppam (held at Tirupati) during 7-9 January 2007.
- 2. Ghute V. B.* and Shirke D. T. (2011). "A bivariate nonparametric synthetic control chart for monitoring process location", *International Congress on Productivity, Quality, Reliability, Optimization and Modeling*, organized by ISI, QCI and DRDO, New Delhi during, 6-7 February 2011.
- 3. Ghute V. B. (2011). "Robustness to non-normality of the multivariate synthetic |S| control chart", *International Conference on Statistics, Probability and Related Areas* organized by Cochin University of Science and Technology, Cochin during 19-22 December, 2011.
- 4. Ghute V. B. (2012). "Multivariate moving average control chart for process variability", *International Conference on Statistics and Information Analytics* organized by Loyola College Chennai during August 22-25, 2012.
- 5. Ghute V. B. (2012). "Multivariate nonparametric control chart", *International Conference on Frontiers of Statistics and its Applications* organized by Pondicherry University Pondicherry during December 21-23, 2012.
- 6. Rajmanya S. V. * and Ghute V. B. (2012). "A synthetic control chart for monitoring process variability", *International Conference on Frontiers of Statistics and its Applications* organized by Pondicherry University Pondicherry during December 21-23, 2012.
- 7. Ghute V. B. (2013). "Robust Monitoring of process variability", *International Conference on Recent Advances in Statistics and Their Applications* organized by Dr. B. A. M. University Aurangabad during December 26-28, 2013.

- 8. Zombade D. M.* and Ghute V. B. (2013). "A nonparametric control chart for variability", *International Conference on Recent Advances in Statistics and Their Applications* organized by Dr. B. A. M. University Aurangabad during December 26-28, 2013.
- 9. Rajmanya S. V.* and Ghute V. B. (2013). "Synthetic G chart for monitoring process variability", *International Conference on Recent Advances in Statistics and Their Applications* organized by Dr. B. A. M. University Aurangabad during December 26-28, 2013.
- 10. Ghute V. B. (2014). "Improved process variability control chart", *International Conference on Statistics and Information Technology for Growing Nation* organized by Sri Venkateswara University Tirupati during November 30-December 02, 2014.
- 11. Zombade D. M.* and Ghute V. B. (2014). "Nonparametric control chart based on runs statistic", *International Conference on Statistics and Information Technology for Growing Nation* organized by Sri Venkateswara University Tirupati during November 30-December 02, 2014.
- 12. Dargopatil P. M.* and Ghute V. B. (2014). "Control chart for variability of autocorrelated process", *International Conference on Statistics and Information Technology for Growing Nation* organized by Sri Venkateswara University Tirupati during November 30-December 02, 2014.
- 13. Rajmanya S. V.* and Ghute V. B. (2014). "A new bivariate control chart for variability", *International Conference on Statistics and Information Technology for Growing Nation* organized by Sri Venkateswara University Tirupati during November 30-December 02, 2014.
- 14. Nimbale S. M.* and Ghute V. B. (2014). "A neural network scheme for process monitoring", *International Conference on Statistics and Information Technology for Growing Nation* organized by Sri Venkateswara University Tirupati during November 30-December 02, 2014.
- 15. Ghute V. B. (2015). "Improved control charts for process dispersion", *International Conference on Mathematical Sciences* organized by S.G.M. College Karad during 15-16 September 2015.
- 16. Zombade D. M.* and Ghute V. B. (2015). "Nonparametric CUSUM chart for location", *International Conference on Mathematical Sciences* organized by S.G.M. College, Karad during 15-16 September 2015.
- 17. Nimbale S. M.* and Ghute V. B. (2015). "Shift detection of nonparametric signed-rank control chart using artificial neural network", *International Conference on Mathematical Sciences* organized by S.G.M. College, Karad during 15-16 September 2015.
- 18. Rajmanya S. V.* and Ghute V. B. (2015). "EWMA-D control chart for monitoring variability", *International Conference on Celebrating Statistical Innovation and Impact in a World of Big and Small data* organized by S. P. Pune University Pune during 24-25 December 2015.
- 19. Nimbale S. M.* and Ghute V. B. (2015). "Neural network control chart for monitoring individual measurements", 9th Conference of the International Association of Statistical Computing Asian Regional Section organized by National University of Singapore during 17-19 December 2015.
- 20. Ghute V. B. (2018). "Synthetic R chart for monitoring variability of autocorrelated process", *International Conference on Theory and Applications of Statistics and*

- *Information Sciences* organized by Bharathiar University, Coimbatore during 5-7 January 2018.
- 21. Dargopatil P. M.* and Ghute V. B. (2018). "Performance of D chart for monitoring the dispersion of autocorrelated process "*International Conference on Theory and Applications of Statistics and Information Sciences* organized by Bharathiar University, Coimbatore during 5-7 January 2018.
- 22. Deshpande M. M.* and Ghute V. B. (2018). "Comparison of process capability indices under AR(2) process "*International Conference on Theory and Applications of Statistics and Information Sciences* organized by Bharathiar University, Coimbatore during 5-7 January 2018.
- 23. Kapase R. A.* and Ghute V. B. (2018). "Estimating the time of a step change with Tukey's control chart "*International Conference on Theory and Applications of Statistics and Information Sciences* organized by Bharathiar University, Coimbatore during 5-7 January 2018.

National Conferences

- 1. Ghute V. B. * and Shirke D. T. (2005). "Bivariate nonparametric control charts", *Conference of Indian Society for Probability and Statistics* organized by Bangalore University, Bangalore during 28-30 December 2005.
- 2. Ghute V. B. * and Shirke D. T. (2007). "A synthetic T² control chart with adaptive sample sizes", *National Conference on Statistical Modeling and Inference* organized by Shivaji University, Kolhapur during 12-14 February 2007.
- 3. Ghute V. B. (2009). "A nonparametric signed-rank control chart for bivariate process location", *National Seminar on Statistical Inference and Applications* organized by Shivaji University, Kolhapur during 22-23 May 2009.
- 4. Ghute V. B. (2011). "Bivariate nonparametric CUSUM control charts", *National Conference on Advances in Statistical Theory and Applications* organized by Bangalore University, Bangalore. during 16-18 November 2011.
- 5. Ghute V. B. (2012). "Nonparametric control charts for bivariate process location", *National Conference on Interface between Statistics and other Sciences* organized by Dr. B.A. M. University, Aurangabad during 24-25 February 2012.
- 6. Ghute V. B. (2013). "Development of nonparametric control charts", *National Seminar on Applications of Statistics to Various Fields* organized by Sangameshwar College, Solapur during 4-5 January, 2013.
- 7. Rajmanya S. V.* and Ghute V. B. (2013). "Robustness of synthetic D chart for non-normality", *National Seminar on Applications of Statistics to Various Fields* organized by Sangameshwar College, Solapur during January 4-5 January 2013.
- 8. Ghute V. B. (2013). "Multivariate moving average control charts", *National Conference on Quality, Reliability and Optimization* organized by P.V.P. Mahavidyalaya, Kavathe-Mahankal during 14-15 February 2013.
- 9. Zombade D. M.* and Ghute V. B. (2013). "Nonparametric CUSUM chart for variability", *National Conference on New Horizons of Statistics* organized by Solapur University, Solapur during October 19-21 October 2013.
- 10. Rajmanya S. V.* and Ghute V. B. (2013). "Robustness of synthetic G chart for non-normality", *National Conference on New Horizons of Statistics* organized by Solapur University, Solapur during 19-21 October 2013.

- 11. Nimbale S. M.* and Ghute V. B. (2013). "An Artificial Neural Network (ANN) approach to X-bar chart", *National Conference on New Horizons of Statistics* organized by Solapur University, Solapur during 19-21 October 2013.
- 12. Zombade D. M.* and Ghute V. B. (2014). "Nonparametric control charts for monitoring the process dispersion", *National Conference on Applied Statistics and Related Working Practices* organized by North Maharashtra University, Jalgaon during 30-31 January 2014.
- 13. Nimbale S. M.* and Ghute V. B. (2015). "Artificial neural network model for monitoring fraction nonconforming control chart", *National Conference on Knowledge Innovation and Engineering* organized by Kruti Institute of Technology and Engineering, Raipur during 10-11 April 2015.
- 14. Rajmanya S. V.* and Ghute V. B. (2015). "CUSUM control chart for monitoring process variability", *National Seminar on Recent Developments in Applied Statistics* organized by Balwant College, Vita during 25-26 September 2015.
- 15. Zombade D. M.* and Ghute V. B. (2015). "A new nonparametric control chart for process location", *National Seminar on Recent Developments in Applied Statistics* organized by Balwant College, Vita during 25-26 September 2015.
- 16. Nimbale S. M.* and Ghute V. B. (2015). "An artificial neural network approach to nonparametric control charts", *National Seminar on Recent Developments in Applied Statistics* organized by Balwant College, Vita during 25-26 September 2015.
- 17. Rajmanya S. V.* and Ghute V. B. (2016). "EWMA control chart for variability", *National Conference on Applied Statistics* organized by Shivaji University, Kolhapur during March 11-12 March 2016.
- 18. Nimbale S. M.* and Ghute V. B. (2016). "Artificial neural network scheme for EWMA chart", *National Conference on Applied Statistics* organized by Shivaji University, Kolhapur during 11-12 March 2016.
- 19. Dargopatil P. M.* and Ghute V. B. (2017). "Effect of autocorrelations on performance of the S chart", *National Conference on Applied Statistics and Informatics* organized by Shivaji University, Kolhapur during 10-11 March 2017.
- 20. Dargopatil P. M.* and Ghute V. B. (2017). "Effect of autocorrelations on synthetic S chart for process variability", *National Conference in Statistics and Their Applications to Society* organized by Department of Statistics, Savitribai Phule Pune University, Pune during 23-25 March 23-25, 2017.
- 21. Kapase R. A.* and Ghute V. B. (2018). "Identifying the time of step change with individual control chart", *National Conference for Women in Statistics and Analytics" organized* by Savitribai Phule Pune University, Pune during 14-16 February 2018.
- 22. Dargopatil P. M.* and Ghute V. B. (2018). "Performance analysis of bivariate |S| chart in the presence of autocorrelation", Nonparametric synthetic control charts for bivariate process location", *National Seminar on Statistical Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.
- 23. Gardi C. G.* and Ghute V. B. (2018). "New synthetic control chart for bivariate process", *National Seminar on Statistical Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.
- 24. Kapase R. A.* and Ghute V. B. (2018). "Identifying the change point with statistical control chart based on exponential distribution", *National Seminar on Statistical*

- *Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.
- 25. Deshpande M. M.* and Ghute V. B. (2018). "Process capability analysis for autocorrelated data", *National Seminar on Statistical Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.

Papers Presented in University Level Conferences

- 1. Ghute V. B. (2005). "Bivariate nonparametric control charts", *Research Colloquium*, organized by Shivaji University, Kolhapur during November 22, 2005.
- 2. Ghute V. B. (2006). "A synthetic control chart for monitoring process variability", *Campaign on University Research and Training*, organized by Shivaji University, Kolhapur during October 6-7, 2006.
- 3. Ghute V. B. (2006). "Nonparametric synthetic control charts for bivariate process location", *Research Colloquium*, organized by Shivaji University, Kolhapur during November 25, 2006.

Invited Talks

- 1. "Multivariate Statistical Process Control", *National Level Seminar on Recent Developments in Statistical Quality Control* organized by K.B.P. Mahavidyalaya, Pandharpur during 05-06 October 2009.
- 2. "Statistical Quality Control", *One Day Workshop on Revised Syllabus of Statistics for B.Sc. II and BCS-I* organized by Balwant College, Vita on 03 December 2009.
- 3. "Acceptance Sampling for Attributes", *Workshop on R Software* organized by Sangameshwar College, Solapur on 03 January 2010.
- 4. "Multivariate Process Control", *National Conference on Industrial Statistics and Computational Mathematics* organized by North Maharashtra University, Jalgaon on 23 January, 2010.
- 5. "Nonparametric Control Charts", *National Level Seminar on Recent Developments in Statistics and Quality Control* organized by K.B.P. Mahavidyalaya, Pandharpur during 26-27 August 2010.
- 6. "Point Estimation", *A Workshop on NET/SET Coaching for Statistics* organized by Shivaji University, Kolhapur on November November 2010.
- 7. "Dispersion Control Techniques", *National Workshop on Recent Trends in Statistics* organized by Dr. Patangrao Kadam Mahavidyalaya, Sangli on 01 January 2011.
- 8. "Applications of Statistics", *Workshop on SPSS* organized by Sangameshwar College, Solapur on January 27 January 2012.
- 9. "Performance Improvement of Variability Control Charts", *National Seminar on Recent Developments in Statistical Modeling* organized by Shivaji University, Kolhapur during 12-13 October 2012.
- 10. "Multivariate Process Control Charts", *National Seminar on Recent Trends in Applied Statistics* organized by Y.C. Institute of Science, Satara during 14-15 December 2012.
- 11. "Distribution Theory", *UGC Sponsored Workshop for Training SC / ST and Minority Candidates for NET Examination* organized by Shivaji University, Kolhapur on 8 December 2013.

- 12. "The synthetic D Chart under Non-normality", *National Conference on Current Practices in Mathematics, Statistics and Actuarial Science* organized by North Maharashtra University, Jalgaon during March 7-8 March 2013.
- 13. "A Nonparametric Control Chart procedure for Monitoring Multivariate Process Location", *National Seminar on Statistical Inference and Stochastic Modeling* organized by Karnatak University, Dharvad during 15-16 March 2013.
- 14. "Log Linear Models for Contingency Tables and Their Applications", *National Workshop on Techniques for Discrete Data Analysis* organized by Shivaji University, Kolhapur during 21-22 March 2013.
- 15. "Synthetic Control Chart Approach to Monitor Process Dispersion", *National Conference on Applied Statistics and Related Working Practices* organized by North Maharashtra University, Jalgaon during 30-31 January 2014.
- 16. "Testing of Hypothesis", *State Level Workshop on Research Methodology in Economics* organized by Solapur University, Solapur on 24 February 2014.
- 17. "Large Sample Tests", *Workshop on use of Statistics in Biological Research* organized by Y. C. Institute of Science, Satara on 24 September 2015.
- 18. "Nonparametric control chart for joint monitoring of location and scale", *National Seminar on Recent Developments on Applied Statistics* organized by Balwant College Vita during 25-26 September 2015.
- 19. "Improved control chart structure for process parameters", *International Conference on Celebrating Statistical Innovation and Impact in a World of Big and Small Data* organized by S.P. Pune University, Pune during 20-24 December 2015.
- 20. "An efficient monitoring of process variability", *State Level Seminar on Recent Trends in Industrial Statistics* organized by A. S. C. College, Ramanandnagar on 30 January 2016.
- 21. "Joint monitoring of location and scale", *National Conference on Applied Statistics* organized by Shivaji University, Kolhapur during 10-11 March 2016.
- 22. "Inferential Statistics" *National Level workshop on Data Science organized* by Walchand Institute of Technology, Solapur during 20-21 January 2017.
- 23. "Performance of Non-parametric Control Chart for Location" *National Conference on Applied Statistics and Informatics* organized by Department of Statistics, Shivaji University, Kolhapur during March 10-11 March 2017.
- 24. Resource Person for Workshop on "*Draft Syllabus under Autonomous Status*" organized by Y. C. Institute of Science, Satara on 22 December 2017.
- 25. Invited talk on "A skip sampling strategy to reduce the effect of autocorrelation on the multivariate control chart", *National Seminar on Statistical Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.
- 26. Resource person for "*One Day Workshop on Drafting Syllabus Recommendations B.Sc. III (Statistics*)" organized by Sangameshwar College, Solapur on 26 February 2018.

Chaired Session in Conferences / Seminars

- 1. *One Day Workshop on Revised Syllabus of Statistics for B.Sc. II and BCS-I* organized by Balwant College, Vita on 03 December 2009.
- 2. National Level Seminar on Recent Developments in Statistics and Quality Control organized by K.B.P. Mahavidyalaya, Pandharpur during 26-27 August 2010.

- 3. *National Seminar on Applications of Statistics to Various Fields* organized by Sangameshwar College, Solapur during 4-5 January 2013.
- 4. *National Conference on Current Practices in Mathematics, Statistics and Actuarial Science* organized by North Maharashtra University, Jalgaon during 7-8 March 2013.
- 5. *National Conference on New Horizons of Statistics* organized by Solapur University, Solapur during 19-21 October, 2013.
- 6. International Conference on Recent Advances in Statistics and Their Applications organized by Dr. B. A. M. University Aurangabad during December 26-28 December 2013.
- 7. *International Conference on Mathematical Sciences* organized by S.G.M. College, Karad during 15-16 September 2015.
- 8. *National Conference on Applied Statistics* organized by Shivaji University, Kolhapur during March 10-11 March 2016.
- 9. *National Conference on Applied Statistics and Informatics* organized by Department of Statistics, Shivaji University, Kolhapur during 10-11 March 2017.
- 10. *National Seminar on Statistical Modelling and Applications" organized* by Shivaji University, Kolhapur during 23-24 February 2018.

Guest Lectures

- 1. Delivered expert lecture on "Methods of Estimation", *NET / SET Coaching in Statistics* at Shivaji University, Kolhapur on 18 February 2012.
- 2. Delivered invited talk on "Industrial Statistics", *National Statistics Day* at District Statistical Office, Solapur on 29 June 2012.
- 3. Delivered expert lecture on "Research Methodology", in *Special Summer School Programme* organized by Academic Staff College, Dr. B. A. M. University, Aurangabad on 27 July 2012.
- 4. Delivered expert lecture on "Statistical Analysis and Research" in *Short term course on faculty development program* organized by B. K. D. Mahavidyalaya, Chakur Dist. Latur on 19 October 2014.
- 5. Delivered series of lectures on "Bayesian Inference" for M.Sc. Statistics students during 19-20 October 2015 at Shivaji University, Kolhapur.
- 6. Delivered guest lecture on "Industrial Statistics" for M.Sc. Statistics students at Yashavantrao Chavan Institute of Science Satara on 31 January, 2016.
- 7. Delivered lecture on "Testing of Hypothesis" in two day camp for B. Sc. II Statistics students organized by SUSTA and S. G. M. College, Karad on 9-10 January 2016.
- 8. Delivered lecture on "Job Opportunities in Statistics" for B.Sc. Statistics students at Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur on 14 February 2017.
- 9. Delivered Inaugural Speech as Chief Guest in National Conference on Statistics in Social Science Research organized by Kasturbai College of Education Solapur on 26 February 2018.
- 10. Delivered Special Lectures on "Statistical Quality Control" under special lecture series organized by Department of Studies in Statistics, Karnatak University, Dharwad on 21 March 2018.