

Shashibhushan B. Mahadik

Professor and Head
Department of Statistics
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Education

Ph. D. (Statistics)	2007, Shivaji University, Kolhapur
M. Phil. (Statistics)	2000, Shivaji University, Kolhapur
SET (Statistics)	1998, University of Pune
M. Sc. (Statistics)	1997, Shivaji University, Kolhapur
B. Sc. (Statistics)	1995, Yashawantrao Chavan College of Science, Karad

Employment Details

Professor and Head	February 2022– till date, Department of Statistics, Shivaji University, Kolhapur
Professor	December 2017– till date, Department of Statistics, Shivaji University, Kolhapur
Associate Professor	December 2014 – December 2017, Department of Statistics, Shivaji University, Kolhapur
Assistant Professor	August 2014 – December 2014, Department of Statistics, Shivaji University, Kolhapur August 2012 – August 2014, Department of Statistics, Solapur University, Solapur
Lecturer/Assistant Professor	December 2001– August 2012, D R K College of Commerce, Kolhapur
Lecturer	September 1998 – December 2001, Department of Statistics, Shivaji University, Kolhapur

Research Interests

Statistical Process Control: *Adaptive control charts, Control charts based on sequential sampling*

Distance Sampling: *Accuracy and robustness of distance sampling methods*

Research Impact

Citation Index (2023)

Google Scholar:287  <https://scholar.google.co.in/citations?user=GKjfqL8AAAAJ&hl=en>

SCOPUS:184  <https://www.scopus.com/authid/detail.uri?authorId=18037480400>

h-Index (2023)

Google Scholar: 10

SCOPUS: 8

Projects

- 2021-2024 The Development of Nonparametric Control Charts Based on Sequential Sampling
Sponsored by CSIR-HRDG, New Delhi
- 2019-2021 The Development of Two-Sided SPRT Control Charts *Sponsored by Shivaji University, Kolhapur*
- 2009-2011 The Development of Simple Adaptive Control Charts *Sponsored by UGC, New Delhi*

Courses Taught

Linear Algebra	Sampling Theory
Distribution Theory	Stochastic Processes
Estimation Theory	Statistical Quality Control
Theory of Testing of Hypotheses	Regression Analysis
Linear Models and Design of Experiments	Business Statistics
Planning and Analysis of Industrial Experiments	Asymptotic Inference

Publications

- 1 Mahadik, S. B. & Godase, D. G. (2023). The SPRT sign chart for process location. *Communications in Statistics-Theory and Methods*, 52(7), 2276–2290.
- 2 Godase, D. G. & Mahadik, S. B. (2022). The SPRT sign chart for process dispersion. *Stochastics and Quality Control*, 37(1), 101–106.
- 3 Godase, D. G., Mahadik, S. B. & Rakitzis, A. C. (2022). The SPRT control charts for the Maxwell distribution. *Quality and Reliability Engineering International*, 38(4), 1713–1728.
- 4 Godase, D. G., Rakitzis, A. C., Mahadik, S. B. & Khoo, M. B. (2022). Deciles-based EWMA-type sign charts for process dispersion. *Quality and Reliability Engineering International*, 38(7), 3726–3740.
- 5 Godase, D. G. & Mahadik, S. B. (2021). The combined Shewhart–CUSUM sign charts. *Communications in Statistics-Simulation and Computation*, 1–10.
- 6 Mahadik, S. B., Godase, D. G. & Teoh, W. (2021). A two-sided SPRT control chart for process dispersion. *Journal of Statistical Computation and Simulation*, 91(17), 3603–3614.

- 7 Halake, K. S., Godase, D. G. & Mahadik, S. B. (2020). Power comparison of kolmogorov-smirnov test under ranked set sampling and double ranked set sampling. *International Journal of Agricultural and Statistical Sciences*, <https://connectjournals.com/03899.2020.16.671>.
- 8 Mahadik, S. B., Godase, D. G., Patil, S. M., Pisal, S. V., Jadhav, P. S. & Warake, S. B. (2020). Reanalysis of the impact of urbanization on bird species diversity around amravati. *International Journal of Agricultural and Statistical Sciences*, <https://connectjournals.com/03899.2020.16.509>.
- 9 Godase, D. G. & Mahadik, S. B. (2019). The SPRT control chart for process dispersion. *Quality and Reliability Engineering International*, doi.org/10.1002/qre.2481.
- 10 Mahadik, S. B. (2017). A unified approach to adaptive Shewhart control charts. *Communications in Statistics-Theory and Methods*, 46(20), 10272–10293.
- 11 Mahadik, S. B. (2015). A simultaneous evaluation of adaptive design parameters policies for Hotelling's T^2 charts. *International Journal of Science, Engineering and Technology Research*, 4, 3936–3944.
- 12 Mahadik, S. B. (2014a). \bar{X} charts with variable sampling interval, control limits, and warning limits. *International Journal of Engineering Research & Technology*, 3, 615–620.
- 13 Mahadik, S. B. (2014b). Hotelling's T^2 charts with variable sample size, sampling interval, and warning limits. *International Journal of Science, Engineering and Technology Research*, 3(1), 41–54.
- 14 Mahadik, S. B. (2013a). Variable sample size and sampling interval Hotelling's T^2 charts with runs rules for switching between sample sizes and sampling interval lengths. *International Journal of Reliability, Quality and Safety Engineering*, 20(04), 1350015.
- 15 Mahadik, S. B. (2013b). \bar{X} charts with variable control and warning limits. *Economic Quality Control*, 28(2), 117–124.
- 16 Mahadik, S. B. (2013c). \bar{X} charts with variable sample size, sampling interval, and warning limits. *Quality and Reliability Engineering International*, 29(4), 535–544.
- 17 Mahadik, S. B. (2013d). \bar{X} charts with variable sampling interval and warning limits. *Journal of Academia and Industrial Research*, 2(2), 103–110.
- 18 Mahadik, S. B. (2013e). Hotelling's T^2 charts with variable sampling interval and warning limit. *International Journal of Quality Engineering and Technology*, 3(4), 289–302.
- 19 Mahadik, S. B. (2013f). Variable sample size and sampling interval \bar{X} charts with runs rules for switching between sample sizes and sampling interval lengths. *Quality and Reliability Engineering International*, 29(1), 63–76.
- 20 Mahadik, S. B. (2012a). Exact results for variable sampling interval Shewhart control charts with runs rules for switching between sampling interval lengths. *Communications in Statistics-Theory and Methods*, 41(24), 4453–4469.
- 21 Mahadik, S. B. (2012b). Hotelling's T^2 charts with variable control and warning limits. *International Journal of Quality Engineering and Technology*, 3(2), 158–167.
- 22 Mahadik, S. B. (2012c). Variable sampling interval Hotelling's T^2 charts with runs rules for switching between sampling interval lengths. *Quality and Reliability Engineering International*, 28(2), 131–140.
- 23 Mahadik, S. B. & Shirke, D. T. (2011). A special variable sample size and sampling interval Hotelling's T^2 chart. *The International Journal of Advanced Manufacturing Technology*, 53(1-4), 379–384.
- 24 Mahadik, S. B. & Shirke, D. T. (2009). A special variable sample size and sampling interval \bar{X} chart. *Communications in Statistics—Theory and Methods*, 38(8), 1284–1299.

- 25 Mahadik, S. B. & Shirke, D. T. (2007a). Economic design of a modified variable sample size and sampling interval \bar{X} chart. *Economic Quality Control*, 22(2), 273–293.
- 26 Mahadik, S. B. & Shirke, D. T. (2007b). On the superiority of a variable sampling interval control chart. *Journal of Applied Statistics*, 34(4), 443–458.

Students Advising

Ph.D.: Awarded-01, Ongoing-06

Co-Curricular Activities

Member of the Authorities

Senate, Shivaji University, Kolhapur (2022 onwards)
Board of Studies in Statistics, Shivaji University, Kolhapur (I/C Chairman, 2022-onwards)
Board of Studies in Business Economics, DRK College of Commerce, Kolhapur (2022 onwards)
Academic Council, CSIBER, Kolhapur (2022 onwards)
Academic Council, SGM College, Karad (2022 onwards)
Standing Committee, Shivaji University, Kolhapur (2019-2022)
Board of Studies in Business Economics, Shivaji University, Kolhapur (2018-2022)
Board of Studies in Statistics, YCIS, Satara and SGM College, Karad (2018-2022)

President, Shivaji University Statistics Teachers' Association (2022 onwards)

Avishkar Coordinator of Shivaji University, Kolhapur (2019-2022)

Editorial Board Member

International Journal of Quality Engineering and Technology

Reviewer

Quality and Reliability Engineering International
Communications in Statistics – Theory and Methods
Communications in Statistics – Simulation and Computation
International Journal of Advanced Manufacturing technology
Quality Technology & Quantitative Management

Professional Memberships

Indian Society for Probability and Statistics (ISPS)

International Indian Statistical Association (IISA)

Shivaji University statistics Teachers' Association (SUSTA)
