Curriculum Vitae

Name: **Santosh Shashikant Sutar**
Gender: Male
Nationality: Indian
Date of Birth: 11th November, 1986
Birth Place: Karad, District- Satara, Maharashtra, India
Marital status: Married
Present Designation: Assistant Director / Assistant professor,
Yashwantrao Chavan School of Rural Development (YCSRD),
Shivaji University, Kolhapur.
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Communication Address: Yashwantrao Chavan School of Rural Development (YCSRD),
Vidyanagar, Shivaji University, Kolhapur, (M.S.) 416 004.

Languages Known: English, Marathi and Hindi.
Statistical Software: R-SOFTWARE, SPSS, MINITAB and MATHEMATICA

Academic Details :-

Examination	Year	Board/University	Percentage	Class
* Ph.D. (Statistics)	May 2018	Savitribai Phule Pune University, Pune	-	-
SET (Mathematical Sciences)	Nov, 2011	Savitribai Phule Pune University, Pune	-	-
M.Sc. (Statistics)	2007-09	Shivaji University, Kolhapur	73.38 (Aggregate)	Distinction
B.Sc. (Statistics)	2004-07	Shivaji University, Kolhapur	77.56 (Aggregate)	Distinction
Higher Secondary Certificate	2003-04	Maharashtra State Board	68.67	First
Secondary School Certificate	2001-02	Maharashtra State Board	73.86	First

*** Ph. D. Details:**

Topic: 'Modeling and Analysis of Load Sharing Phenomenon'

Guide: Prof. T. V. Ramanathan,

Department of Statistics, Savitribai Phule Pune University, Pune.

Date of Declaration: 11th May, 2018.

- **Area of Research:** Survival Analysis and Reliability Theory, Machine Learning and Data Mining, Topics related to Rural Development.

Teaching and Research Experience:-

1) Currently working as Assistant Director / Assistant professor at Yashwantrao Chavan School of Rural Development, Shivaji University, Kolhapur from 5th March, 2014 to till date.
2) Worked as Junior Research Fellow and Senior Research Fellow at Department of Statistics, Savitribai Phule Pune University, Pune under the fellowship of 'UGC Research Fellowships in Science for Meritorious Students' (2011- 2014) grant received from UGC, New Delhi.
3) Worked as Assistant Professor (Lecturer) in Marathwada Mitra Mandal's College of Commerce (MMCC), Pune from 15 July, 2010 to 30 April, 2011.
4) Worked as Assistant Professor (Lecturer) in Pad. Dr. D. Y. Patil Arts, Commerce and Science College, Pimpri, 18 from November 2009 to May 2010.
5) Worked as Assistant Professor (Lecturer) in Deshbhakt Ratnappa Kumbhar College of Commerce, Kolhapur from July 2009 to October 2009.
6) Successfully carried out 6 months training course for CPT Course with 100% output from students end at Deshbhakt Ratnappa Kumbhar College of Commerce, Kolhapur.

Achievement/Awards:-

1) Received 'Prerana Purskar 2019-20' from Atmaram Vidya Mandir, Ogalewadi, Karad, Maharashtra on 11th January, 2020.
2) Received 'Dr. M. N. Das Memorial Young Scientist Merit Certificate - 2019' from Society of Statistics, Computer and Applications (SSCA) during 21st Annual Conference of SSCA at S.V. Agricultural College, ANGRAU, Tirupati, Anadhra Pradesh, India held during 29-31 January, 2019.
3) Received 'Indian Statistical Association Student and New Researcher Travel Award' in International Conference on Computer Age Statistics in the Era of Big and High Dimensional Data organized by Department of Statistics, Savitribai Phule Pune University, Pune during 3-5 January, 2019.
4) Received 'Prof. T. S. K. Moothathu Young Statistician Award-2018' for best Ph.D. thesis during 'Fourth International Conference on Statistics for Twenty-first Century-2018 (ICSTIC-2018)' organized by Department of Statistics, University of Kerala, Trivandrum, Kerala during 13-15, December 2018.
5) Received 'SAS Best Paper Award in Theory Section' for research article in 'National Conference for Women in Statistics and Analytics' organized by Department of Statistics, Savitribai Phule Pune University, Pune during 14th -16th February, 2018.

Fellowships/Scholarships:-

- Recipient of 'UGC Research Fellowships in Science for Meritorious Students' (2011-2014) from UGC, New Delhi.

Research Projects:-

1) Major Research Project entitled, 'Load Sharing Systems: Reliability Modeling, Inference Procedures and Applications' (CRG/2021/005672/MS) funded by *'Department of Science and Technology (DST)- Science and Engineering Research Board (SERB)' under 'Core Research Grant (CRG)'* (Amount Sanctioned Rs. 21,00,219/-)
2) Short-term Empirical Research Project entitled "A Socio-economic Impact Assessment of Pradhan Mantri Mudra Yojana with special reference to Western Maharashtra" funded by *ICSSR, New Delhi*. (Co. PI and Amount Sanctioned Rs. 14,00,000/-)
3) 'District Strategic Plan' for Sangli District funded by Collectorate of Sangli and District Planning Office (DPO), Sangli
4) Working as 'Statistician' for the Multi-institutional major research project entitle "Research and Development in Jaggery Process and Product Development" funded by *Rajiv Gandhi Science and Technology Commission (RGSTC), Mumbai*.
5) Research project entitled 'A Machine Learning Approach to Renewable Energy Devices Enabled by Automatic Literature Data Extraction and Analysis' funded by *Shivaji University, Kolhapur under 'Research Strengthen Scheme 2021-2022'*.
6) Research Project entitled 'A Study on Empowering . omen through Financial Education: Special Reference to Kolhapur' funded by *Maharashtra State Women Commission, Mumbai.*
7) Research Project entitled 'A Statistical Analysis of Usage of Digital Payment Methods: A Special Reference to Shivaji University, Kolhapur' funded by *'The United Western Bank's Late R. N. Godbole Chair, Shivaji University, Kolhapur*.
8) Research Project entitled 'Load Sharing Models: Some New Developments' funded by *Shivaji University, Kolhapur under 'Research Initiation Scheme 2018-2019'*

Publications:-

A. Research Papers Published in Journals:

1. **S. S. Sutar** and U.V. Naik-Nimbalkar, Accelerated failure time models for load sharing systems, IEEE Transactions on Reliability, 72, 486-498, 2014. IF – 5.869 (IEEE)
2. **S. S. Sutar,** Parameter estimation of the modified Weibull distribution using Monte Carlo Expectation Maximization algorithm, Model Assisted Statistics and Applications, 11 (2), 171-178, 2016. IF – 0.368 (IOS Press BV)
3. Y. V. Joshi, S. Prasad, and **S. S. Sutar,** Optimization of Variants of LMS Algorithm for Adaptive Noise Cancellation, International Journal of Automatic Control System, 2 (1), 18-31, 2016.
4. **S. S. Sutar** and U.V. Naik-Nimbalkar, A model for k-out-of-m load-sharing systems, Communications in Statistics-Theory and Methods, 45 (20), 5946-5960, 2016. IF-0.893 (Taylor and Francis)
5. T.D. Dongale, A.R. Chavan, **S. S. Sutar,** A.M. Mane, Ch. K. Volos, P.K. Gaikwad and RK Kamat, Journal of Telecommunication, Electronic and Computer Engineering (JTEC), 9 (2), 47-51, 2017. (Universiti Teknikal Malaysia Melaka)

6. **S. S. Sutar,** On Measuring the Multidimensional Poverty of Rajendranagar Area of Kolhapur City, Contemporary Social Sciences, 27 (2), 199, 2018. IF- 2.495 (Research Foundation)
7. **S. S. Sutar** and U.V. Naik-Nimbalkar, A load share model for non-identical components of a k-out-of-m system, Applied Mathematical Modelling, 72, 486-498, 2019. IF- 5.000 (Elsevier)
8. **S. S. Sutar,** Likelihood Ratio Test and Non-parametric Test for Load Sharing, Austrian Journal of Statistics, 50 (1), 41-58, 2021. IF- 0.980 (Austrian Society for Statistics)
9. B. Ranpariya, G. Salunke, S. Karmakar, K. Babiya, **S. S. Sutar**, N. Kadoo, P. Kumbhakar and S. Ghosh, Antimicrobial synergy of silver-platinum nanohybrids with antibiotics, Frontiers in Microbiology, 11, 610968, 2021. IF- 5.200 (Frontiers Media S.A.)
10. Bhosale V. and **S. S. Sutar,** A Study on Digital Pedagogy for School Teachers: Special Reference to Kolhapur, Journal of Emerging Technologies and Innovative Research, 8 (4), 457-463, 2021. IF- 7.950 (JETIR)
11. **S. S. Sutar,** S. M. Patil, S. J. Kadam, R. K. Kamat, Deok-kee Kim and T. D. Dongale, Analysis and prediction of hydrothermally synthesized ZnO-based dye-sensitized solar cell properties using statistical and machine-learning techniques, ACS Omega, 6 (44), 29982-29992, 2021. IF- 4.100 (American Chemical Society)
12. P. K. Katkar, N. S. Padalkar, D. D Kumbhar, A. H. Patil, **S. S. Sutar**, S. J. Kadam, R. K. Kamat, Seung-Hyun Chun and T. D. Dongale, Binder-free synthesis of nanostructured amorphous cobalt phosphate for resistive memory and artificial synaptic device applications, ACS Applied Electronic Materials, 4 (4), 1852-1863, 2022. IF- 4.700 (American Chemical Society)
13. A. P. Patil, C. C. Revadekar, G. U. Kamble, S.S. Kundale, S.J. Kadam, **S. S. Sutar**, P. J. Patil and T. D. Dongale, Investigations on resistive switching effect and time series statistical analysis of solution combustion synthesized ZnTiO3 memristive device, Journal of Materials Science: Materials in Electronics, 33 (30), 23390-23403, 2022. IF- 2.800 (Springer)
14. T. D. Dongale, **S. S. Sutar*,** Y. D. Dange, A. C. Khot, S. S. Kundale, S. R. Patil, S. V. Patil, A.A Patil, S. S. Khot, P.J .Patil, Jinho Bae, R. K. Kamat and Tae Geun Kim, Machine learning-assisted design guidelines and performance prediction of CMOS-compatible metal oxide-based resistive switching memory devices, Applied Materials Today, 29, 101650, 2022. IF- 8.663 (Elsevier) [* Equal contribution]
15. S.L. Patil, R.S. Redekar, O.Y. Pawar, S.S. Kundale, **S. S. Sutar,** K.V. More, V.D. Chavan, Deok-kee Kim, T.D. Dongale and N.L. Tarwal, Precursor-dependent resistive switching properties of nanostructured g-C3N4: statistical and experimental investigations, Journal of Materials Science: Materials in Electronics, 34 (2), 155, 2023. IF- 2.800 (Springer)
16. V. C. Karade, **S. S. Sutar*,** Seung Wook Shin, M. P. Suryawanshi, Jun Sung Jang, K. Singh Gour, R. K. Kamat, Jae Ho Yun, T. D. Dongale and Jin Hyeok Kim, Machine Learning Assisted Analysis, Prediction, and Fabrication of High-Efficiency CZTSSe Thin Film Solar Cells, Advanced Functional Materials, 2303459, 2023. IF- 19.000 (Wiley) [* Equal contribution]

17. **S. S. Sutar,** C. G. Gardi and S. D. Pawar, Analyzing Load Sharing System Reliability: A Modified Weibull Distribution Approach, Reliability: Theory & Applications 18 (3 (74)), 708-724, 2023. IF - 0.500 (Gnedenko Forum)
18. S. M. Patil, S. S. Kundale, **S. S. Sutar**, P.J. Patil, A. M. Teli, S. A. Beknalkar, R.K. Kamat, Jinho Bae, Jae Cheol Shin and T. D. Dongale, Unraveling the importance of fabrication parameters of copper oxide-based resistive switching memory devices by machine learning techniques, Scientific Reports, 13 (1), 4905, 2023. IF- 4.996 (Nature Publishing Group)
19. S.L. Patil, O.Y .Pawar, H.S. Patil, **S.S. Sutar**, G.U. Kamble, D.K. Kim, J.H. Kim, T.G. Kim, R.K. Kamat, T.D. Dongale and N.L. Tarwal, The g-C3N4-TiO2 nanocomposite for non-volatile memory and artificial synaptic device applications, Journal of Alloys and Compounds, 171024, 2023. IF-6.200 (Elsevier)
20. A. C. Khot, T. D. Dongale, K. A. Nirmal, J. K. Deepthi, **S. S. Sutar** and Tae Geun Kim, 2D Ti3C2Tx MXene-derived self-assembled 3D TiO2nanoflowers for nonvolatile memory and synaptic learning applications, Journal of Materials Science & Technology, 150, 1-10, 2023. IF- 10.900 (Elsevier)
21. A. R. Patil, T. D. Dongale, L. D. Namade, S. V. Mohite, Yeonho Kim, **S. S. Sutar**, R.K. Kamat and K. Y. Rajpure, Sprayed FeWO4 thin film-based memristive device with negative differential resistance effect for non-volatile memory and synaptic learning applications, Journal of Colloid and Interface Science, 642, 540-553, 2023. IF- 9.900 (Elsevier)
22. M. K. Yadav, S.S. Kundale, **S. S. Sutar**, T. D. Dongale, P. Kumar and N. Panwar, Non-volatile resistive switching behavior and time series analysis of Ag/PVA-graphene oxide/Ag device, Journal of Applied Physics, 134 (10), 2023. IF- 2.286 (American Institute of Physics)
23. P. P. Patil, S. S. Kundale, S. V. Patil, **S. S. Sutar**, J.Bae, S. J. Kadam, K. V. More, P. B. Patil, R. K. Kamat, S. Lee and T. D. Dongale, Self-assembled lanthanum oxide nanoflakes by electrodeposition technique for resistive switching memory and artificial synaptic devices, Small, 19 (46), 2303862, 2023. IF- 13.300 (Wiley)
24. V. C. Karade, **S. S. Sutar**, Jun Sung Jang, K. S. Gour, Seung Wook Shin, M. P. Suryawanshi, R. K. Kamat, T. D. Dongale, Jin Hyeok Kim and Jae Ho Yun, Unraveling the Effect of Compositional Ratios on the Kesterite Thin-Film Solar Cells Using Machine Learning Techniques, Crystals, 13 (11), 1581, 2023. IF- 2.700 (MDPI)
25. A. C. Khot, P. S. Pawar, T. D. Dongale, K. A. Nirmal, **S. S. Sutar**, K D. Jayan, N. B. Mullani, D. D. Kumbhar, Yong Tae Kim, Jun Hong Park, Jaeyeong Heo and Tae Geun Kim, Self-assembled vapor-transport-deposited SnS nanoflake-based memory devices with synaptic learning properties, Applied Surface Science, 158994, 2023. IF- 6.7 (Elsevier)
26. O. Apine, S. Parit, V. Kanugade, **S. S. Sutar**, S. Mahajani, J. Jadhav, An improved analytical method for the quantification of iron, copper and manganese in non-centrifugal sugars (NCS), Journal of Food Composition and Analysis, 124, 105662, 2023. IF- 4.300 (Academic Press Inc.)

27. V. D Chavan, J. Aziz, H. Kim, S. R. Patil, R. E Ustad, Z. A. Sheikh, C. S. Patil, M. Y Chougale, S. R. Sabale, S. A Patil, **S. S Sutar**, R. K. Kamat, J. Bae, T. D. Dongale, D. Kim, Transformation of rust iron into a sustainable product for applications in the electronic, energy, biomedical, and environment fields: Towards a multitasking approach, Nano Today, Volume 54, February 2024, 102085, IF- 17.400 (Elsevier)
28. C. S. Bhosale, P. R. Mane, J. S. Salunkhe, V. M. Mothgare, **S. S. Sutar**, S. B. Manglekar, A. S. Jadhav, P. D. Raut, Ambient Air Quality Monitoring with Reference to Particulate Matter (PM10) in Kolhapur City, Nature Environment and Pollution Technology, 22 (04), 2023, 2029-2037, IF- 0.169 (Technoscience Publications)

B. Research Papers Published in Conference Proceeding

1. **Title:** 'Challenges before Consumers' Co-operative Societies in India'
   (Proceeding of National Seminar on ""Strengthening of Co-operative Sector in India" Sponsored by Indian Council of Social Science" at organized by Yashwantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 16th -17th March, 2018, ISBN: ISBN: 978-81-8486-693-3).

2. **Title:** 'Green Economy: Ideal Livelihood Model for Sustainable Development' *(Proceeding of Two-Day National Conference on "Rural Livelihood Models for Sustainable Development" at organized by Yashwantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 14th -15th September, 2017, ISBN: 978-81-8486-575-2)* (with Vishal V. Ovhal).

Edited Book:-

- Editor of Book entitled 'Application of Operation Research in Management' (ISBN -978-93-92887-95-6) Published by Centre of Distance Education and Online Education, Shivaji University, Kolhapur
- Editor of Proceeding of Two-Day National Conference on "Rural Livelihood Models for Sustainable Development" at organized by Yashwantrao Chavan School of Rural Development, Shivaji University, Kolhapur during 14th -15th September, 2017, ISBN: 978-81-8486-575-2

Book Chapter in Edited Book:-

- Book chapter entitled 'Introduction of OR and LPP' in edited book entitled 'Application of Operation Research in Management' (ISBN -978-93-92887-95-6) Published by –Centre of Distance Education and Online Education, Shivaji University, Kolhapur
- Book chapter entitled 'Project Planning and Quantitative Techniques' in edited book entitled 'Project Planning and Quantitative Techniques' (ISBN -978-93-92887-98-7' Published by – Centre of Distance Education and Online Education, Shivaji University, Kolhapur

Other Activities:-

- Presented Papers in more than 20 International/National/Conferences/Workshops etc.
- Invited/Guest lectures on topics related to Statistics in 25 workshops/Lectures series.
- Attended more than 20 international/ national workshops, conferences, seminar etc.

- Teaching experience: 11 years.
- Research Experience: 15 years.
- M. Phil. : 01 (working)
- Ph.D. : 01 (working)
- Project Fellow: 01 (working under DST-SERB-CRG Project)
- Master Degree Projects Guidance: 20

Memberships of Associations:-

1. International Indian Statistical Association (IISA)
2. Indian Statistical Association (ISA)
3. Indian Society of Probability and Statistic (ISPS)
4. Shivaji University Postgraduate Teachers Association (SUPTA)
5. Shivaji University Statistics Teachers Association (SUSTA)

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