Dr. Swati V Chande
HOD-Computer Science

Papers published in Journals
International

1. Sharma S. & Chande S. V. (2024). Deep Learning-Powered Test Case Prioritization in Continuous Integration: A Comparative Study and Efficiency Analysis" International Journal of Computational Vision and Robotics (IJCVR), Inderscience Publishers.

2. Sahu, H., Joshi, N. K., & Chande, S. V. (2023). Comprehensive Review and Analysis of Security and Privacy for Multimedia Objects over the Internet of Multimedia Things (IoMT). *International Journal of Intelligent Systems and Applications in Engineering*, *11*(9s), 469-481.

3. Sharma, S., & Chande, S. V. (2023). Article Optimizing test case prioritization using machine learning algorithms. *Journal of Autonomous Intelligence*, *6*(2).

4. Gupta, S., & Chande, S. V. (2022). Performance Optimization for Distributed Database Based on Cache Investment. *ADBU Journal of Engineering Technology*, *11*(3).

5. Pareek, P., & Chande, S. V.(May 2022). Remgtc Framework for Mobile Application Testing. *Available at SSRN 4117551*.
   https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4117551

6. Chaturvedi, R., Chande, S. V., & Sharma, A. (2021) Evaluation and Refinement of MVC Web Application Architecture. Journal of Information and Computational Science. 11(3), 1-5.

7. Mathur P., Chande S.V. (2020) Empirical Investigation of Usability Evaluation Methods for Mobile Applications Using Evidence-Based Approach. In: Chaudhary A., Choudhary C., Gupta M., Lal C., Badal T. (eds) Microservices in Big Data Analytics. Springer, Singapore.

8. Chande S. V. (2019) Database Query Optimization using Genetic Algorithms: A Systematic Literature Review. International Journal of Advanced Trends in Computer Science and Engineering (Scopus Indexed), 8(5) ISSN 2278-3091, pp. 1903-1913. (https://doi.org/10.30534/ijatcse/2019/14852019)
   Link: http://www.warse.org/IJATCSE/static/pdf/file/ijatcse14852019.pdf.

9. Soni A. & Chande S. V. (2019) Impact of Varying Parameters in Improved Multi Colony Ant Optimization Algorithm for Join Order Problem in Distributed Databases. International Journal of Advanced Trends in Computer Science and Engineering (Scopus Indexed), 8(5) ISSN 2278-3091, pp. 2442-2448.

10. Soni A. & Chande S. V. (October, 2019) An Improved Multi Colony Ant Optimization Algorithm to Solve Join Problem in Query Optimization. International Journal of Information Technology and Electrical Engineering (ITEE Journal). 8(5) pp 64-70. ISSN:- 2306-708X. (https://doi.org/10.30534/ijatcse/2019/87852019)
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11. Soni A. & **Chande S. V.** (October, 2018). Multi Colony Ant Optimization: A New Approach to Query Optimization In Distributed. In International Journal of Research in Computer Application and Management. 8(10). ISSN no. 2231-1009. pp 1-3.

12. Mathur, P., & **Chande, S. V.** (2017, November). Evidence based Approach to Discover Effective Non-Functional Testing Technique(s) in Typical Software Domains. *International Journal of* Advanced *Studies in Computer Science and Engineering,* 6(11), 16-25. Impact Factor 0.418.

13. Mathur, P., & **Chande, S. V.** (2017, October). Usability Testing Methods for Mobile Learning Applications. *International Journal of Computer Science & Mobile Applications* 5(10) 1-9 ISSN: 2321-8363 Impact Factor: 4.123.

14. Nanda, R., **Chande, S. V.**, & Sharma, K. S. (2017). Determining Appropriate Cache-size for Cost-effective Cloud Database Queries. *International Journal of Computer Applications*, *157*(6).

15. Nanda, R., **Chande, S. V.**, & Sharma, K. S. (2017). Determining the Effect of Similar Queries in Cache-based Cloud Datastores. *International Journal of Advanced Research in Computer Science*, *8*(3).

16. Gupta, S., & Chande, S. V. (2016). A Hybrid Cache Investment Strategy for Distributed Database Queries. *International Journal of Computer Applications*, *145*(5).

17. Nanda, R., Sharma, K. S., & **Chande, S. V**. (2016). Enhancing the Query Performance of NoSQL Datastores using Caching Framework. *International Journal of Computer Science and Information Technologies*, *7*(5), 2332-2336.

18. Jain, A., & **Chande, S. V.** (2015, December). Impact of Different Selection Strategies on Performance of GA based Information. *International Journal of Computational Science & Applications* (ISSN 2200 – 0011), 5(6) 69-79, DOI:10.5121/ijcsa.2015.5605.

19. **Chande, S. V.** (2015, November). A Conceptual Framework for Computational Thinking as a Pedagogical Device, *International Journal of Innovative Research in Computer and Communication Engineering*, 3(11), ISSN (Online): 2320-9801, ISSN (Print): 2320-9798, DOI: 10.15680/IJIRCCE.2015. 0311104.

20. Parnami, S., Sharma, K. S., & **Chande, S. V.** (2015, September). Empirical Validation of Test Case Generation based on All-edge Coverage Criteria. *International Journal of Computer Applications*, *126*(11). (ISSN 0975 – 8887)

21. Flora, H. K., Wang, X., & **Chande, S. V.** (2014). An investigation on the characteristics of mobile applications: A survey study. *International Journal of Modern Education and Computer Science*, *6*(6).

22. **Chande, S. V.** (2014, September). Computational sustainability: an emerging research and academic discipline. *International Journal of Advances in Computer Science and Technology (IJACST)* ISSN 2320 –2602, 3(8), Global Impact Factor (GIF): 0.499.

23. Jain, A., **Chande, S. V.,** & Tiwari, P. (2014). Relevance of genetic algorithm strategies in query optimization in information retrieval. *International Journal of Computer Science and Information Technologies*, *5*(4), 5921-5927.

24. Flora, H. K., Wang, X., & **Chande, S. V.** (2014). An investigation into mobile application development processes: Challenges and best practices. *International Journal of Modern Education and Computer Science*, *6*(6), 1.

25. Flora, H. K., & **Chande, S. V.** (2014). A systematic study on agile software development methodologies and practices. *International Journal of Computer Science and Information Technologies*, *5*(3), 3626-3637.
26. Flora, H. K., **Chande, S. V.** & Wang, X. (2014). Adopting an agile approach for the development of mobile applications. *International Journal of Computer Applications*, *94*(17).

27. Mathur, P., & **Chande, S. V**. (2014). Software Testing through Evidence Gathering. *Discovery Journal*, ISSN: 2278–5469, EISSN: 2278–5450, 15(41), 68-71.

28. Mathur, P., & **Chande, S. V.** (2013). Software Testing through Evidence Gathering. *International Journal of Information and Computation Technology*, ISSN 0974-2239, 3(7), 625-632. Impact Factor 0.687.

29. Flora, H. K., & **Chande, S. V.** (2013). A Review and Analysis on Mobile Application Development Processes using Agile Methodologies. *International Journal of Research in Computer Science*, *3*(4), 9.

30. Tiwari, P., & **Chande, S. V.** (2013). Optimization of distributed database queries using hybrids of ant colony optimization algorithm. *International Journal of Advanced Research in Computer Science and Software Engineering*, *3*(6).

31. *Tiwari, M. P., &* **Chande, S. V.** *(2013,* June*).* Query optimization strategies in distributed databases. International Journal of Advances in Engineering Sciences*, 3(3), 23-29.* ISBN: 978-981-07-2631-7.

32. Parnami, S., Sharma, K. S., & **Chande, S. V.** (2012). A survey on generation of test cases and test data using artificial intelligence techniques. *International Journal of Advances in Computer Networks and its Security*, *2*(1), 16-18.

33. Mathur, P., & **Chande, S. V.** (2012, November). An Evidence-based Approach to Discovery and Assessment of Software Engineering Decisions. *Special Issue of International Journal of Computer Applications (ISSN 0975 – 8887) on Issues and Challenges in Networking, Intelligence and Computing Technologies – ICNICT 2012*, ISBN: 973-93-80870-09-1, 30-36, Impact Factor 0.814.

34. Parnami, S., Sharma, K. S., & **Chande, S. V.** (2012). A survey on generation of test cases and test data using artificial intelligence techniques. *International Journal of Advances in Computer Networks and its Security, 2(1), 16-18.* ISSN 2250 -3749, April 2012.

35. Sinha, M., & **Chande, S. V.** (2010, June). Query optimization using genetic algorithms. *Research Journal of Information Technology, 2(3), 139-144.*, ISSN 1815-7432, Science Alert, Academic Journals Inc. USA, Digital Object Identifier: 10.3923/rjit.2010.139.144.

36. **Chande, S. V.** & Sinha, M., (2010, June). *"*Towards Evolutionary Approach for Database Query Optimization"*, International Journal of Advanced Engineering & Applications, Steps-India, Print ISSN 09757783 Online ISSN 0975 – 7791.*

37. **Chande, S. V**., & Sinha, M. (2009). Genetic algorithm: a versatile optimization tool. *BIJIT-BVICAM's International Journal of Information Technology, 1(1), 7-12.*

National
1. Chande S. V. (2022, May). Architecture and workflow of Proref policy: A solution for caching candidate in distributed environment. Purana (UGC-CARE GROUP-I), ISSN: 0555-7860.
2. Jain*,* A. & **Chande, S. V.** (2013, June). Heuristic Optimization of Queries in Information Retrieval, *Journal of IMS Group,* 10(1) 96-102*.*
3. **Chande, S. V.** (2004, May-August). HCI: Prospects and Step-ups. Oorja-Journal of Management and IT*, 2(2).*

Papers published in Conference Proceedings
International
1. Chande, S. V. (2022, February). A Review on Security & Privacy Issues in Internet Multimedia of Things. ICCITD-2022.
2. Sharma, S., & Chande, S. V. (2022, September). Simulation and Analysis of Test Case Prioritization Using Fuzzy Logic. In International Conference on Innovative Computing and Communications: Proceedings of ICICC 2022, Volume 2 (pp. 577-588). Singapore: Springer Nature Singapore.
3. Pareek, P., & Chande, S. V. (2021). Grey box approach for mobile application testing. In *Rising Threats in Expert Applications and Solutions: Proceedings of FICR-TEAS 2020* (pp. 411-419). Springer Singapore.
4. Chande, S. V. (2022, February). A Review on Security & Privacy Issues in Internet Multimedia of Things. ICCTD-2022
5. Mathur P., Chande S.V. (November, 2019) Empirical Investigation of Usability Evaluation Methods for Mobile Applications Using Evidence-Based Approach. In: Chaudhary A., Choudhary C., Gupta M., Lal C., Badal T. (eds) Microservices in Big Data Analytics. pp 95-110 Springer, Singapore.

6. Tiwari P. & **Chande S. V.** (February, 2019). Join Query Optimization using Genetic Ant Colony Optimization Algorithm for Distributed Database. Springer, CCIS.

7. Tiwari, P., & **Chande, S. V.** (2018). Optimal Ant and Join Cardinality for Distributed Query Optimization Using Ant Colony Optimization Algorithm. In Emerging Trends in Expert Applications and Security vol. 841 (pp. 385-392). Springer, Singapore.

8. Jain, A., & **Chande, S. V.** (2013, December). *Information portal system for a digital campus based on information architecture.* In Innovation and Technology in Education (MITE), 2013 IEEE International Conference in MOOC (pp. 349-352). IEEE., DOI: 10.1109/MITE.2013.6756365, IEEE Xplore, Print ISBN: 978-1-4799-1625-2, INSPEC Accession Number: 14147751.

9. **Chande, S. V**., & Sinha, M. (2011, December). *Genetic optimization for the join ordering problem of database queries. In* India Conference (INDICON), 2011 Annual IEEE *(pp. 1-5). IEEE.*

10. Debana, C. & **Chande, S. V.** (2011, July), *Intelligent Systems in Agile Project Management.* Proceedings of the International Conference on Managing Excellence for Emerging Global Paradigm In Business & Technology, July 15-16, 2011*.*

11. Keswani, B., Keswani, P., Sharma, M. & **Chande, S.V.** (2009, April). *New Electronic Business Models: Utilization of Private and Public WiFi Coverage using W-LAN.* Proceedings of International Conference on Emerging & Futuristic System and Technology, LIET, Alwar.

12. **Chande, S. V**., & Sinha, M. (2010)*. Optimization of relational database queries using genetic algorithms.* In Proceedings of the International Conference on Data Management, IMT Ghaziabad.

National
1. Tiwari, P. & **Chande, S.V.** (2012, November). *Query Optimization in Distributed Databases using Hybrids of Ant Colony Optimization Algorithm,* National Conference on Emerging Trends in Information Technology, Institute of Management Studies, Ghaziabad.

2. Jain, A. & **Chande, S.V.** (2012, November). *Heuristic Optimization of Queries in Information Retrieval*, National Conference on Emerging Trends in Information Technology, Institute of Management Studies, Ghaziabad.

3. Jain, A. & **Chande**, **S. V.** (2011, December). *Enhancing Information Access and Retrieval Techniques to improve effectiveness of Information Architecture*, 46th Annual Convention 2011 on ICT4U, Computer Society of India, Ahmadabad Chapter.

4. **Chande**, **S. V.** (2011, April). *Corporate Initiatives to plug the gaps for quality IT education, Current state and future directions.* National Conference on Restructuring of Global Economy: Challenges Ahead, Jaipur.

5. **Chande**, **S. V. &** Sinha, M. (2008, March). *The use of Genetic Algorithms for Optimization of Relational Database Queries: A comparative Study*, Proceedings of the IEEE Conference on Applications of Intelligent Systems (AIS 2008).

Other Publications
Newspapers/ Magazine Articles
1. **Chande S. V.** (2003, July), Efficient Interaction: Human Computer Interface Design, *Impulse.*

2. **Chande S. V. &** Sharma, A. (2002, November). Expert Systems – Automating Expertise. *I.T. (Information Technology) magazine*, EFY.

3. **Chande**, **S. V. (2000).** Importance of Career Counseling. *Turning Point, Rajasthan Patrika*.

Book

1. **Chande, S. V. (1997).** MS - Office Question Bank. BPB publications, New Delhi, ISBN: 81-7029-892-X

Book Chapters
1. **Chande, S. V.** (2014). Cloud Database Systems: NoSQL, NewSQL, and Hybrid. *In* Handbook of Research on Cloud Infrastructures for Big Data Analytics *(pp. 216-231). IGI Global.DOI: 10.4018/978-1-4666-5864-6, ISBN13: 9781466658646, ISBN10: 1466658649, EISBN13: 9781466658653.*

2. Edited course material for the Module, Fundamentals of Computers, of the Vardhaman Mahaveer Kota Open University, Kota, 2011.

3. Edited course material and authored chapters for the Module, Software Engineering, of the Vardhaman Mahaveer Kota Open University, Kota, 2009.

4. Edited course material for the Module, Programming in VB & .NET, of the Vardhaman Mahaveer Kota Open University, Kota, 2008.

EDUCATION
- Ph.D., Banasthali Vidyapith, Banasthali
- M.S. (Software Systems), (equivalent to ME/M.Phil.), BITS Pilani
- M.Sc.(Mathematics), University of Rajasthan, Jaipur
- B.Sc. (Hons.)
- Diploma in Management

Awards & Recognitions
- Best Teacher Award, conferred in the category 'Teacher' at 5th Principals and Teachers Award 2016 ceremony, organized by Simply Jaipur, September-2016, at Birla Auditorium, Jaipur.
- Top Mentor Award, IBM AI, for guiding participants of the IBM TGMC competition, 2014.
- Award for meritorious services to the cause of education, International School of Informatics and Management, 2004.
- 'Best Essay' prize in the 'IT for Productivity' based Essay competition organized by the Department of Information Technology, Government of Rajasthan, in 1999.

Editorial Appointments
- Reviewer for publications of International Journal of "Neural Computing and Applications" published by Springer.
- Associate Editor, International Journal of Computational Intelligence Techniques, ISSN: 0976-0466 & E-ISSN: 0976-0474.
- Associate Editor, Journal of Data Mining and Knowledge Discovery, ISSN: 2229-6662 & ISSN: 2229-6670.
- Member, Editorial team, Oorja, International Journal of Management and IT, ISSN: 0974-7869.
- Reviewer, International Journal of Computer and Electrical Engineering, ISSN: 1793-8198 (Online Version); 1793-8163 (Print Version).
- Reviewer for publications of South Asia Institute of Science and Engineering (SAISE).
- Scientific and Technical Committee & Editorial Review Board Member, World Academy of Science, Engineering and Technology (WASET).
- Editorial Board Member for International Conference on Signal Propagation and Computer Technology 2014 (ICSPCT 2014), Ajmer, July 12-13 2014.
- Has been member of Technical Programme Committee for various conferences of National and International repute.

Invited as Resource Person/Speaker
- Invited Special Guest, 6th International Conference on Information and Communication Technology for Competitive Strategies (ICTCS 2021), Global Research Foundation, India, December 17-18 2021
- Session Chair, 6th International Congress on Information and Communication Technology (ICICT 2021), Global Research Foundation, Goa, India, February 25-26, 2021
- Session Chair, 5th International Conference on ICT for Sustainable Development (ICT4SD2020), Global Research Foundation, Goa, India, July 23-24, 2020

- Session Chair, International Conference on Emerging Trends in Expert Applications & Security (ICETEAS-2018), Jaipur Engineering College & Research Centre, Jaipur, INDIA, February 17-18, 2018
- Session Chair, National Conference on Data Management and Security (NCDMS 2011), Jaipur, India, September 22-23, 2011.
- Invited Speaker, National Conference on Emerging Computing Technologies in Modern Era (ECTME-14), Jaipur, January 22-23, 2014.
- Resource person for "Workshop on concepts and techniques of Evaluation and Measurement", International College for Girls, Jaipur, April 21-22, 2008.
- Resource Person for the Refresher Course in Information Technology, Conducted at the Center for Converging Technologies, University of Rajasthan, Jaipur, from November 11, 2013 to November 30, 2013. Conducted sessions on Artificial Intelligence and Bio Inspired Computing.
- Resource Person for the Refresher Course in Information Technology, conducted by the Academic Staff College, University of Rajasthan, December 2012-January 2013. Conducted sessions on 'Nature Inspired Computing' and 'Geo Informatics'.
- Resource person for the AICTE sponsored Faculty Development Programme on Fuzzy Logic and Neural Networks for Forecasting, Sri Balaji College of Engineering and Technology, Jaipur. Conducted Sessions on "Genetic Algorithms for Forecasting", June 04-19, 2012.
- Resource person for the training programme for PGT(Commerce) for teaching Computer Applications in Commerce conducted by the Kendriya Vidyalaya Sangathan at KV6, Jaipur, October 16-17, 2007.
- Resource person for the Refresher Course in Information Technology, conducted by the Academic Staff College, University of Rajasthan, February 23-24, 2007. Conducted sessions on Artificial Intelligence and Soft Computing.
- Orientation Program in computers for the faculty and staff of The IIS Institutional Network, Jaipur, April 28, 2006 - May 30, 2006.
- Faculty Development Program on "Genetic Algorithms: A practical approach", for Computer Science faculty, IIIM, Jaipur, March 27, 2006.
- Resource person for the Refresher Course in Information Technology, conducted by the Academic Staff College, University of Rajasthan, February 20-22, 2006. Conducted sessions on Artificial Intelligence, Soft Computing and Natural Language Processing.
- FDP on 'Teaching Techniques' for Computer Science faculty of India International School and International College for Girls, Jaipur, September 2001.

Professional Memberships
- Machine Intelligence Research Labs, USA
- World Academy of Science, Engineering and Technology (WASET)
- South Asia Institute of Science and Engineering (SAISE) (Sr. Member)
- International Association of Computer Science and Information Technology, Singapore. (Sr. Member)
- International Association for Engineers, Hong Kong
- Indian Association for Research in Computing Science
- Computer Society of India
- Indian Society for Training and Development
- Special Interest Group in Artificial Intelligence (SIGAI) of the Computer Society of India
- Special Interest Group on Software Engineering of the Computer Society of India