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#### **PATENT**

**1.** "A Framework for Reliability & Performance Analysis of Safety-Critical System using Stochastic Modeling," 202031014381, Published, 05/2020.

## **PUBLICATIONS**

## Research Papers in SCI/SCIE Indexed Journals: 12

- 1. Avaneesh Kumar Yadav, Ranvijay, Rama Shankar Yadav, **Ashish Kumar Maurya**, "State-of-the-art approach to extractive text summarization: a comprehensive review," Multimedia Tools and Applications, Springer, pp. 1-63, 2023.
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- 2. Niharika Keshari, Dinesh Singh, and Ashish Kumar Maurya, "A survey on Vehicular Fog Computing: Current state-of-the-art and future directions," *Vehicular Communications*, Elsevier, Vol. 38, pp. 100512, 2022. <a href="https://doi.org/10.1016/j.vehcom.2022.100512">https://doi.org/10.1016/j.vehcom.2022.100512</a>
- Dinesh Singh, Ashish Kumar Maurya, Ranvijay, and Rama Shankar Yadav, "A trust-based clustering approach to form stable clusters in vehicular ad hoc networks," *Journal of Ambient Intelligence and Humanized Computing*, Springer, pp. 1-20, 2022.
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- **4.** Sushil Kumar Maurya, Dinesh Singh, and **Ashish Kumar Maurya**, "Deceptive Opinion Spam Detection Approaches: A Literature Survey," **Applied Intelligence**, Springer, pp. 1-46, 2022. https://doi.org/10.1007/s10489-022-03427-1
- 5. Vinay Kumar, Ashish Kumar Maurya, Karam Veer Singh, Lalit Kumar Singh, Pooja Singh, Aditya Narayan Hati, and Vibhav Prakash Singh, "Safety analysis of safety-critical systems for their applicability on NPP systems: A state-of-the-art review," Quality and Reliability Engineering International, Wiley, Vol. 37, No. 5, pp. 1796-1831, 2021.
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- **8. Ashish Kumar Maurya**, and Anil Kumar Tripathi, "An Edge Priority-based Clustering Algorithm for Multiprocessor Environments," *Concurrency and Computation: Practice and Experience*, *Wiley*, Vol. 31, No. 11, e5060, 2019. <a href="https://doi.org/10.1002/cpe.5060">https://doi.org/10.1002/cpe.5060</a>
- 9. Ashish Kumar Maurya, and Anil Kumar Tripathi, "ECP: a novel clustering-based technique to schedule precedence constrained tasks on multiprocessor computing systems," Computing (Vienna/ New York), Springer, Vol. 101, No. 8, pp. 1015-1039, 2019.
  - https://doi.org/10.1007/s00607-018-0636-3
- 10. Ashish Kumar Maurya, and Anil Kumar Tripathi, "On benchmarking task scheduling algorithms for heterogeneous computing systems," The Journal of Supercomputing, Springer US, Vol. 74, No. 7, pp. 3039-3070, 2018.
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- **11.** Vinay Kumar, Lalit Kumar Singh, Pooja Singh, Karm Veer Singh, **Ashish Kumar Maurya**, and Anil Kumar Tripathi, "Parameter Estimation for Quantitative Dependability Analysis of Safety-Critical Control Systems of NPP," *IEEE Transactions on Nuclear Science*, Vol. 65, No. 5, pp. 1080-1090, 2018. <a href="https://doi.org/10.1109/TNS.2018.2827106">https://doi.org/10.1109/TNS.2018.2827106</a>
- **12.** Dharmendra Prasad Mahato, Ravi Shankar Singh, Anil Kumar Tripathi, and **Ashish Kumar Maurya**, "On scheduling transactions in a grid processing system considering load through Ant Colony Optimization," *Applied Soft Computing*, *Elsevier Netherland*, Vol. 61, pp. 875-891, December 2017. https://doi.org/10.1016/j.asoc.2017.08.047

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- 2. Dinesh Singh, Ashish Kumar Maurya, Ranvijay, and Rama Shankar Yadav, "CRLMDA: CRL Minimization and Distribution Algorithm in Cluster-based VANETs," *International Journal of Communication Networks and Distributed Systems*, Inderscience, 2022.
- 3. Avaneesh Kumar Yadav, Ashish Kumar Maurya, Ranvijay, and Rama Shankar Yadav, "Extractive Text Summarization Using Recent Approaches: A Survey," *Ingénierie des Systèmes D Information,* IIETA, Vol. 26, No. 1, pp. 109-121, 2021. https://doi.org/10.18280/isi.260112
- **4. Ashish K. Maurya**, Ashish Kumar, and Dinesh Singh, "RWP Mobility model based performance evaluation of OLSR and LAR1 routing protocols in MANET," *International Journal of Computer Networks & Communications*, AIRCCSE, Vol. 3, No. 6, pp.145-156, 2011. [https://airccse.org/journal/cnc/1111cnc09.pdf]

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- 2. Ashish K. Maurya, Dinesh Singh, and Ajeet Kumar, "Performance Comparison of DSR, OLSR and FSR Routing Protocols in MANET Using Random Waypoint Mobility Model," *International Journal of Information and Electronics Engineering*, Vol. 3, No. 5, pp. 440-443, 2013. [IET Inspec]
- **3. Ashish K. Maurya**, and Dinesh Singh, "Median predictor based data compression algorithm for wireless sensor network," *International Journal of Computer Applications*, Vol. 24, No. 6, pp. 15-18, 2011.
- **4. Ashish K. Maurya**, and Dinesh Singh, "Simulation based Performance Comparison of AODV, FSR and ZRP Routing Protocols in MANET," *International Journal of Computer Applications*, Vol. 12, No. 2, pp. 23-28, 2010.

## Research Papers in International Conferences: 18

- 1. Sujeet Kushwaha, Yash Verma, Surbhi Mayank, Revadi Sai Eswar, Vishal Verma, and Ashish Kumar Maurya, "Smart Garbage Monitoring System Using IoT and Cloud Computing," 2022 IEEE Students Conference on Engineering and Systems (SCES), pp. 1-6, MNNIT Allahabad, Prayagraj, India, July 01-03, 2022.
- 2. Shreyas Tandon, Niharika Singh, Shivani Porwal, Satiram, and Ashish Kumar Maurya, "E-Matdaan: A Blockchain based Decentralized E-Voting System," 2022 IEEE Students Conference on Engineering and Systems (SCES), pp. 1-6, MNNIT Allahabad, Prayagraj, India, July 01-03, 2022.
- **3. Ashish Kumar Maurya**, "Resource and Task Clustering based Scheduling Algorithm for Workflow Applications in Cloud Computing Environment," *In the Proceedings of the 2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC)*, pp. 566-570, JUIT, Solan, H.P., India, November 06-08, 2020. [ISBN: 978-1-7281-7132-6]
- 4. Dipty Tripathi, Ashish Kumar Maurya, Amrita Chaturvedi, and Anil Kumar Tripathi, "A Study of Security Modeling Techniques for Smart Systems," In the Proceedings of the International Conference on Machine Learning, Big Data, Cloud and Parallel Computing(Com-IT-Con), Faridabad, Haryana, India, February 14-16, 2019. [ISBN: 978-1-7281-0211-5]
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- **6. Ashish Kumar Maurya**, and Anil Kumar Tripathi, "An Energy Aware Edge Priority-based Scheduling Algorithm for Multiprocessor Environments," *In Proceedings of the 24th International Conference on Parallel and Distributed Processing Techniques and*

- Applications (PDPTA'18), pp. 42-46, Las Vegas, Nevada, **USA**, July 30 August 2, 2018. [ERA B ranked] [ISBN: 1-60132-487-1]
- 7. Ashish Kumar Maurya, and Anil Kumar Tripathi, "Deadline-Constrained Algorithms for Scheduling of Bag-of-Tasks and Workflows in Cloud Computing Environments," In Proceedings of the Second International Conference on High Performance Compilation, Computing and Communications 2018, (HP3C-2018), pp. 6-10, Hong Kong, March 15-17, 2018. [ISBN: 978-1-4503-6337-2]
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- **9.** Satya Prakash, **Ashish Kumar Maurya**, and Anil Kumar Tripathi, "Energy Efficient Scheduling of Independent Tasks on Multicore Processors with Software Controlled Dynamic Voltage Scaling," *In the Proceedings of the 23rd International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'17*), pp. 179-183, Las Vegas, Nevada, **USA**, July 17-20, 2017. [ERA B ranked] [ISBN No.: 1-60132-466-9]
- 10. Dharmendra Prasad Mahato, Ashish Kumar Maurya, Anil Kumar Tripathi, and Ravi Shankar Singh, "Dynamic and Adaptive Load Balancing in Transaction Oriented Grid Service," In the Proceedings of the 2<sup>nd</sup> International Conference on Green High Performance Computing (ICGHPC 2016), Tamilnadu, India, pp. 1-5, IEEE, February 26-27, 2016. [ISBN: 978-1-4673-6615-1]
- **11. Ashish K. Maurya**, Dinesh Singh, Ajeet Kumar, and Ritesh Maurya, "Random waypoint mobility model based performance estimation of On-Demand routing protocols in MANET for CBR applications," *In International Conference on Computing for Sustainable Global Development (INDIACom)*, BVICAM, New Delhi, India, pp. 835-839, IEEE, March 5-7, 2014. [ISBN: 978-93-80544-12-0]
- 12. Ritesh Maurya, Surya Kant Singh, Ashish K. Maurya, and Ajeet Kumar, "GLCM and Multi Class Support vector machine based automated skin cancer classification," *In International Conference on Computing for Sustainable Global Development (INDIACom)*, BVICAM, New Delhi, India, pp. 444-447. IEEE, March 5-7, 2014. [ISBN: 978-93-80544-12-0]
- **13.** Priyanshu and **Ashish K. Maurya**, "Impact of node density on the performance of GSR & TORA routing protocols," *In the Proceedings of the 5th International Conference on Computer and Communication Technology (ICCCT 2014)*, MNNIT Allahabad, India, pp. 251-255, IEEE, September 26-28, 2014. [ISBN: 978-1-4799-6758-2]
- **14.** Mohd. Shoaib, and **Ashish K. Maurya**, "Comparative Study of Different Web Mining Algorithms to Discover Knowledge on the Web," *In Proceedings of Elsevier Second International Conference on Emerging Research in Computing, Information*,

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- **16.** Avadh Kishor Singh, Ajeet Kumar, and **Ashish K. Maurya**, "Association rule mining for web usage data to improve websites," *In International Conference on Advances in Engineering and Technology Research (ICAETR)*, Unnao, India, pp. 1-6, IEEE, August 1-2. 2014. [ISBN: 978-1-4799-6393-5]
- 17. Avadh Kishor Singh, Ajeet Kumar, and Ashish K. Maurya, "An empirical analysis and comparison of Apriori and FP-growth algorithm for frequent pattern mining," In International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), Tamilnadu, India, pp. 1599-1602, IEEE, May 8-10, 2014. [ISBN: 978-1-4799-3914-5]
- **18.** Dinesh Singh, **Ashish K. Maurya**, and Anil K. Sarje, "Comparative performance analysis of LANMAR, LAR1, DYMO and ZRP routing protocols in MANET using Random Waypoint Mobility Model," *In 3rd International Conference on Electronics Computer Technology (ICECT)*, Kanyakumari, India, Vol. 6, pp. 62-66, IEEE, April 8-10, 2011. [ISBN: 978-1-4244-8679-3]

#### Book Chapters: 04

- 1. Dinesh Singh, Ashish Kumar Maurya, Rupesh Kumar Dewang, and Niharika Keshari, "A Review on Internet of Multimedia Things (IoMT) Routing Protocols and Quality of Service," In: Shukla et al. (eds.), Internet of Multimedia Things (IoMT): Techniques and Applications, Academic Press, Elsevier, Chapter 1, pp. 1-29, 2022. [ISBN: 978-0-323-85845-8]
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- 2. Ashish Kumar Maurya, and Dinesh Singh, "IoT Enabling Platforms," In: Wiley Editorial (Author), Internet of Things, An Indian Adaptation: Concepts and Applications. Wiley, Chapter 4, pp. 93-122, 2021. [ISBN: 9789354247842]
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- 3. Vibhav Prakash Singh, and Ashish Kumar Maurya, "Role of Machine Learning and Texture Features for the Diagnosis of Laryngeal Cancer." In: Mohanty et al. (eds.), Machine Learning for Healthcare Applications. Scrivener Publishing, John Wiley & Sons, Chapter 23, pp. 353-367, 2021. [ISBN: 9781119791812] <a href="https://doi.org/10.1002/9781119792611.ch23">https://doi.org/10.1002/9781119792611.ch23</a>
- **4.** Dinesh Kumar, **Ashish Kumar Maurya**, and Gaurav Baranwal, "IoT services in healthcare industry with fog/edge and cloud computing." In: Singh et al. (eds.), IoT-Based Data

Analytics for the Healthcare Industry: Techniques and Applications. Academic Press, Elsevier, Chapter 6, pp. 81-103, 2021. [ISBN: 9780128214763] https://doi.org/10.1016/B978-0-12-821472-5.00017-X