

## BIOGRAPHY



Dr. Shweta Mongia

Associate Professor

Qualification: PhD

Experience: 13 Years

Profile: Dr. Shweta Mongia is an Associate Professor in the Department of Informatics, School of Computer Science at University of Petroleum and Energy Studies, India. She is having 13 years of teaching experience. She has completed her PhD in Computer Engineering from Jamia Millia Islamia University, India on “DEVELOPING A FRAMEWORK FOR CLOUD DATABASE MANAGEMENT SYSTEM ARCHITECTURE”. Dr. Mongia’s teaching and research interests includes Cloud Computing, Big Data Analytics, Artificial Intelligence, Data Science, Machine Learning and related technologies. She is an author or co-author of many journal articles, conference papers, book chapter related to cloud computing, Big Data Technologies. She organized and orated many workshops on Cloud Computing, Machine learning using Python, Big Data Technologies etc. in IIT and various reputed institutes. She is an open-source technology enthusiast who supports and promotes “technology for all” and is actively engaged in activities that aim at empowering communities through tools of technologies. Dr. Shweta has been associated with MSME as a guest faculty and speaker. She has also been a guest speaker at various events promoting Bigdata and Artificial Intelligence and its applications.

Prominent Research Publications:

### International Journals

1. Shweta Mongia, Jaisankar N, Sugandha Sharma, Manoj Kumar, Vasudha Arora, Thompson Stephan, Achyut Shankar, Pragya Gupta, Raghav Kachhawaha, “Prediction of COVID-19 Epidemic Curve of India using Supervised Learning Approach”, **International Journal of Computer Applications in Technology, 2020, Indexed in [Scopus]**.
2. Shweta Malhotra, Mohammad Najmud Doja, Bashir Alam, Mansaf Alam, “Skipnet-Octree based indexing technique for Cloud Database Management System”, **International Journal of Information Technology and Web Engineering (IJITWE) Special Issue: Cloud Computing and Analytics in Web Engineered Environments,**

Volume 13, Issue 3, Article 3, pp-1-13, **Indexed in [Web of Science-ESCI, Scopus, DBLP]**, IGI Publication USA, 2018.

3. Shweta Malhotra, Mohammad Najmud Doja, Bashir Alam, Mansaf Alam, “E-GENMR: Enhanced Generalized Query Processing using Double Hashing Technique through MapReduce in Cloud Database Management System”, **Journal of Computer Science**, Volume 13, Issue 7, Pages 234-246, 2017, Science Publications USA, **Indexed in [Scopus]**.
4. Shweta Malhotra, M.N. Doja, Bashir Alam, Mansaf Alam, “Cloud Database Management System Security Challenges and Solutions: An Analysis”, **CSI transactions on ICT**, Volume 4, Issue 2, pp 199–207, Springer, **Indexed in [INSPEC, Google Scholar]**.
5. Shweta Malhotra, Bashir Alam, M.N. Doja, Mansaf Alam, “Security Issue Analysis for Cloud Computing”, **International Journal of Computer Science and Information Security (IJCSIS)**, Vol. 11 No. 9, ISSN 1947-5500, pages 117-125, IJCSIS Publication, USA, September 2013, **Indexed in [Google Scholar]**.
6. Shweta Malhotra, “JVM/JIT optimization process and an introduction to oracle JRockit JVM” **Journal of advanced research in computer Engineering**, July-Dec2009.

#### **International Conferences-**

1. Shweta Malhotra, Mohammad Najmud Doja, Bashir Alam, Mansaf Alam, “Accelerating EGENMR Database Operations using GPU processing”, International Conference on Computational Intelligence & Informatics ICCII 2017, **Advances in Intelligent Systems and Computing book series (AISC, volume 712)**, pp -669-679, **Indexed in [Scopus], 2018**.
2. Shweta Malhotra, M.N. Doja, Bashir Alam, Mansaf Alam, “Bigdata Analysis and Comparison of Bigdata Analytic Approches”, **International Conference on Computing, Communication and Automation (ICCCA2017)**, ISBN: 978-1-5090-6471-7, Pages 309-314 IEEE Publication ,2017, **Indexed in [Scopus]**.
3. Shweta Malhotra, M.N. Doja, Bashir Alam, Mansaf Alam, “Generalized Query Processing Mechanism in Cloud Database Management System”, Computer Society of India Conference, Bigdata Analytics, **Advances in Intelligent System and Computing AISC, volume 654**, pages 641-648, Springer Publication, 2015, **Indexed in [Scopus]**.
4. Shweta Malhotra, Bashir Alam, M.N. Doja, Mansaf Alam, “Data Integration of Cloud-based and Relational Databases”, **International Conference on Soft Computing Techniques and Implementations (ICSCTI)**, Pages 83-86, IEEE Publication, Oct 2015, **Indexed in [Scopus, ieeexplore]**.
5. Shweta Malhotra, Bashir Alam, M.N. Doja, Mansaf Alam, Asihwarya Anand, “Executing Hive Queries on 3-NODE Cluster and AWS Cluster- Comparative Analysis”, **International Conference on Information Systems Design and Intelligent Applications. Advances in Intelligent Systems and Computing**, vol 433. Pages 307-314, Springer, Indexed in [Scopus].
6. Shweta Malhotra, Bashir Alam, M.N. Doja, Mansaf Alam, “Security Issue Analysis for Cloud Computing”, **International Journal of Computer Science and Information Security (IJCSIS)**, Vol. 11 No. 9, ISSN 1947-5500, pages 117-125, IJCSIS Publication, USA, September 2013, **Indexed in [Google Scholar]**.
7. Shweta Mongia, M.N. Doja, Bashir Alam, Mansaf Alam, “5 layered Architecture of Cloud Database Management System”, **International Conference on parallel and Distributed Computing and Systems**, AASRI Procedia, Vol 5, Pages 194-199, Elsevier Publication, 2013, **Indexed in [DBLP, Scopus]**.

8. Shweta Malhotra, "Accessing the Deep Web using Resource Description Framework", **International Conference on Innovative and Advancements in Information and Communication Technology**. ICIAICT 2012 organized by GBU, Noida on March 2012.
9. Shweta Malhotra, "Analysis of decision tree – A technique of data mining", Shweta Mongia, Priyanka Arora, Aliza Tanvir, **National Conference on Advanced Computer Networks and Information Technology** (NCACNIT-09), Department of Computer Science and Engineering, Guru Jambheshwar University, Hisar, March 2009.
10. Shweta Malhotra, "An Analysis and Comparison of Position based Routing Protocols for Mobile Adhoc Network", Shweta Malhotra, P.K Bhatia, **National seminar on Information and Communication Technology**, JMIT, Radaur on Feb 2006.
11. Shweta Malhotra, "Comparison of position-based routing protocols for MANET", **National Conference on Innovation Applications of IT and Management growth of India**, Apeejay institute of Management, Jalandhar on April 2006.
12. Ashirwad Samuel, Nidhi Rathaur and Shweta Mongia, "Beyond Hadoop: Spark and Storm", International Conference on Advancements in Computing and Management, **Elsevier SSRN**, pages 1024-1030, Oct 2019.
13. Pelumi Abimbola, Anirudh Sanga & Shweta Mongia, "Hadoop Framework Ecosystem: Ant solution to an Elephantic data", International Conference on Advancements in Computing and Management, **Elsevier SSRN**, pages 995-1002, Oct 2019.
14. Toshifa Hussain & Shweta Mongia, "Big Data and Hadoop Tools and Technologies: A review", International Conference on Advancements in Computing and Management, **Elsevier SSRN**, pages 574-578, Oct 2019.

#### Contributions

- Delivered course content of "**Bigdata Analytics**" for Govt of India, MSME(IID)
- Project manager of "**Survey App**" for Directorate of Economics and Statistics under Centre for Policy Planning and Good Governance (CPPGG), Government of Uttrakhand, June 2020.
- Submitted Patent entitled "**Robotic Assistant for Contactless Thermal Scanning, Hand Sanitization and Mask Dispensing for COVID-19 and Other Communicable Disease**", 21<sup>st</sup> May 2020.
- Published Patent entitled "**HYBRID AQUAPONICS SYSTEM FOR CULTIVATION OF PLANTS**", application no. 202011022349 on 26<sup>th</sup> June 2020.
- PI of Seed project entitled "**Behavior based prediction model for increasing productivity of herbal plants in indoor farming**" funded under SEED Scheme of UPES with Project id-UPES/R&D/041119/20.