

Dr. Manvi

#419 , Sector 11, D -Block Faridabad, 121006 Ph: +91-9971599791 Manvi@jcboseust.ac.in
and manvi.siwach@gmail.com

ASSOCIATE PROFESSOR

Total Experience: 17 years

- Currently working as Associate Professor in the Department of Computer Applications at J.C.Bose. University of Science & Technology, YMCA, Faridabad, Haryana, India since 14/01/2008.
- Worked as a Lecturer (CE) in Jind Institute of Engineering & Technology, Jind (Haryana) for one year 2005-2006.

Education & Credentials

- **Ph.D. Computer Engineering** from YMCA University of Science & Technology in 2017.
- **M.Tech Computer Engineering** from YMCA University of Science & Technology, 2008.
- **B.Tech Computer Science**, JIET, Jind, Affiliated to Kurukshetra University 2005.

Responsibilities Taken

At University Level

i) Additional Chief Hostel Warden Girls : 6 Years

- Development of Reading Room & Gym
- Development of New Wing (A-Lalitha)

ii) Hostel Warden: 8 years

- Development of New Wings Kalpana Chawla & Mother Teresa
- Development of Waiting Room for Parents

iii) Member, Career & Counselling Cell: 2016 onwards

- Organized Career Fair 2019
- Career Fest, 15 & 16 April 2024
- Establishment of IAS forum
- Organized Numerous events for students

iv) Member, Institution Innovation Council: 3 Years

- Smart India Hackathon, 2020 & 2022
- Global HR Conclave-2020
- Wisdom Summit 2020

v) Member, University Proctorial Committee : From July 2023 onwards

vi) Coordinator during:

NAAC visit

- Cycle 1, Criteria 5 Student Mentoring & Support
- Cycle 2, i) Departmental Presentation Preparation and Data Collection
ii) Development of policy document for women welfare

NBA visit

- 2017 , SAR Preparation committee for MCA.
- 2019, SAR Preparation committee for IT.

NIRF

- Co-coordinator

vii) Committee Member:

- Technical Advisory-cum-purchase committee for UCC & DA cell
- Establishment of common room for Girls student at University.
- Committee for Adopting online teaching Learning Methodology during Covid
- Inspection Committee in Affiliation branch

At Department Level

- Ph.D Coordinator
- MCA Program Coordinator
- BCA 3rd year Class Coordinator
- Departmental NEP Coordinator
- Alumni Coordinator
- Attendance Coordinator
- Mentor Mentee Coordinator
- Syllabus workshop and BOS Coordinator
- Teacher Feedback Coordinator (2018,2019)
- Sessional Exam Coordinator (Jan 2022- July 2024)
- Training & Placement Coordinator (2020-2023)
- CBS Exam Coordinator (2016-2020)
- Member, Board of Studies (BOS-UG+PG) of the CA department (2016-2022)
- Convener and Member, Syllabus Revision committee.
- Member, Admission committee for MCA , BCA , BSC (A&M) & MSc Courses.
- Member, admission committee

Contribution in Curriculum Development

- National Education Policy 2020 , Departmental Coordinator since 2022.
- Minor Degree in Data Science for BCA program, Designed and Developed scheme and syllabi.
- BCA & BCA (Data Science) 4 year Programs(according to NEP 2020), Designed and Developed the scheme and Syllabi.
- MCA 2 year program : Convener for Design and Development of the Scheme and Syllabi.
- Syllabus workshop, Departmental coordinator
- Member, Board of Studies
 - (BOS-UG/PG) of the CA department (2016-2022).
 - (BOS-UG) of the CA department (2024-2025)
- Member, Board of Faculty of Informatics & Computing
 - (BOF-FIC) (2016-2022),
 - (BOF-FIC) (2024-2025)

**Skill Upgradation: 6 months online certification programme by IIT Delhi
on “DATA SCIENCE & MACHINE LEARNING” from 16.07.2023 to
02.03.2024**

Publications/Research Work

- 1) Sushmita Singh, Manvi Siwach, "Evaluating diabetes dataset for knowledge graph embedding based link prediction", Data and Knowledge Engineering, Volume: 157, May 2025, DOI: <https://doi.org/10.1016/j.datak.2025.102414>
- 2) Sushmita Singh, Manvi Siwach, " Handling Heterogeneous Data in Knowledge Graphs: A Survey," Journal of Web Engineering, Volume 21_4, Page:1145-1186
- 3) Raveena Aggarwal, Jyoti Verma, Manvi Siwach, "Small files' problem in Hadoop: A systematic literature review", Journal of King Saud University-Computer and Information Sciences, <https://doi.org/10.1016/j.jksuci.2021.09.007>
- 4) Mohit Verma, Manvi, Amita Arora, "Rumor detection from social media", Gradiva Review Journal, State University of New York, VOLUME 7 ISSUE 6 2021, ISSN: 0363-8057 , (June, 2021) Page:522-529
- 5) Mohit Verma, Manvi, Amita Arora, "Rumor detection from social media using LSTM and Passive aggressive Classifier", Gradiva Review Journal, State University of New York, VOLUME 7 ISSUE 7 2021, PP:88-97, 0363-8057 (July, 2021)
- 6) Manvi, Ashlesha Gupta, "Prospective Term based Incremental Migrating Crawler", International Journal of Grid and Distributed Computing, Volume 13 No. 2, January 2021, ISSN: 2005-4262, pp:1768-1787 (ESCI).
- 7) Manvi, Ashlesha Gupta, " Collating Various Machines Learning Techniques in Credit Card Fraud Detection", International Journal of Advanced Science and Technology, Volume 29, No. 3, pp. 15546-15556, ISSN:2005-4238. (Scopus)
- 8) Sagun Sharma, Dr. Anuradha Pilai, Dr. Manvi "A car recommendation system based on collaborative filtering and ontology techniques", GIS SCIENCE JOURNAL, Volume 7, Issue 6, June 2020, ISSN NO : 1869-9391 (UGC Approved)
- 9) Manvi Siwach and Jyoti Bhardwaj, "Sentiment Analysis in Messaging Systems: a review", Journal of Emerging Technologies and Innovative Research (JETIR), January 2019, Volume 6, Issue 1, ISSN-2349-5162 (UGC Approved)
- 10) Vipasha Jain , Dr. Manvi Siwach, " A Study On Ranking Based On Review Mining", International Journal Of Creative Research Thoughts", IJCRT | Volume 6, Issue 2 April 2018 | ISSN: 2320-2882 (UGC Approved).
- 11) Manvi, Komal Kumar Bhatia and Ashutosh Dixit , "Automatic Generation of Ontology for Extracting Hidden Web Pages", Springer Nature Singapore Pte Ltd. 2018, V.B. Aggarwal et al. (eds.), Big Data Analytics, Advances in Intelligent Systems and Computing 654, https://doi.org/10.1007/978-981-10-6620-7_14.
- 12) Ankita Gill, Amita Arora, Manvi Siwach, "A Review on Applications of Internet of Things", International Journal Of Current Engineering And Scientific Research (IJCESR),

ISSN (Print): 2393-8374, (Online): 2394-0697, Volume-4, Issue-10, 2017, (UGC Approved).

- 13) Manvi, Deepika Punj and Shweta Sirohi "Ontology based information Extraction Technique: An overview" presented in National Conference on Advances in Mathematics & Computing (AMC-2017) on 1st -2nd May 2017 at YMCA UST Faridabad.
- 14) Manvi, Komal Kumar Bhatia and Ashutosh Dixit, "A *novel design of hidden web crawler using ontology*" International Journal of Engineering Trends & Technology (IJETT), August 2015, ISSN: 2231-5381 DOI : 10.14445/22315381/IJETT-V26P204
- 15) Manvi, Ashutosh Dixit, Komal Bhatia and Rinki Kardam "A *novel Technique for creating Semantic database for hidden web*", in International Journal of Innovative research in Science & Technology(IJIRST), Volume 1, Issue 11, ISSN(online):2349-6010, April 2015, pp 299-305.
- 16) Manvi, Ashutosh Dixit, Komal Bhatia and Jyoti Yadav "Design and Implementation of Domain based Semantic Hidden Web Crawler" in volume 4, Special Issue, May 2015 of International Journal of Innovations and Advancement in Computer Science ISSN 2347-8616.
- 17) Manvi, Komal Kumar Bhatia and Ashutosh Dixit, "Automatic Generation of Ontology from Hidden Web Pages", 50th Golden jubilee international annual convention of Computer Society of India (CSI-2015) theme Digital Life, organised by BVICAM New Delhi, 2nd to 5th December 2015. Conference proceedings published by Springer.
- 18) Manvi, Komal Kumar Bhatia and Ashutosh Dixit, "Ontology based Indexing Technique for Hidden Web" 2nd International conference on Recent Development in Sciences Engineering and Technology organised by GD Goenka University, Faridabad, 30-31, 2015. Proc published with ISBN no. 978-93-84869-85-4. (This paper received best paper award)
- 19) Manvi, Komal Kumar Bhatia and Ashutosh Dixit "Annotating Ranking Techniques for Hidden Web: A Review" 1st international conference on recent trends in computer and information technology research (BSACon'15) organized by BSAITM, Faridabad 25-26 September, 2015.
- 20) Manvi, Ashutosh Dixit and Komal Bhatia "Design of a novel Ranking Technique for Hidden Web pages" at International Conference on Innovative Research in Mechanical, Electrical, Electronics, Civil Computer Science and Information Technology (MECIT-2015), May 16-17, New Delhi.
- 21) Manvi, Ashutosh Dixit, Komal Kumar Bhatia, Rajiv Mishra, "A Novel Architecture of Ontology Mapping System for Hidden Web Retrieval", IEEE International Conference (ICROIT-2014), on Feb 6-8, 2014. at Manav Rachna International University Faridabad. (Scopus Indexed)
- 22) Manvi, Ashutosh Dixit, Komal Kumar Bhatia, Bhumika Wadhwa "Generating domain specific ontology for retrieving hidden web data", IEEE International Conference ISCON, 2014, GLA University, Mathura, 1-2 March 2014. (Scopus Indexed).
- 23) Manvi, Ashutosh Dixit, Komal Kumar Bhatia, "Design of an Ontology based Adaptive Crawler for Hidden Web" In the proceedings of IEEE International Conference on Communication Systems and Network Technologies (CSNT-2013) Apr 6-8, 2013 at MIR Labs Gwalior India pp 659-663. **Print ISBN:** 978-1-4673-5603-9. (Scopus Indexed)

24) Manvi, Ashutosh Dixit, Komal Kumar Bhatia, “*Deep web annotation through hidden web crawlers: a review*”, SIM 2012 at YMCAUST, Faridabad 3- 4th Dec, 2012. Indexed on International Journal of Multidisciplinary Research Studies, Dec 2012.

25) Manvi, Pramesh Dahiya, "Issues and Challenges in Design of an effective Search Engine" “Contemporary Issues in Commerce, Economics, Management and IT” held on 15-16 November, 2013 at Govt. College Julana ,Jind.

26) Manvi, Ashutosh Dixit, A.K.Sharma” Migrating Crawler : A Survey” at Annual Conference of Vijnana Parishad of India & NATIONAL SYMPOSIUM ON Recent Developments in Applicable Mathematics & Information Technology December 4th to 6th, 2009 at JIET,GUNA(M.P.)

27) Manvi, Ashutosh Dixit, A.K.Sharma ,”Migrating Crawler based on Linguistic Analysis of the Documents” at Emerging Trends in Computer Science , Communication and Information Technology, CSCIT2010,9th to 11th January 2010,Nanded, Maharashtra, India

28) Manisha, Manvi Siwach,” Enhancing Road Safety Through Computer Vision: Seatbelt and Helmet Detection, International Symposium On Fusion of Science and Technology-ISFT 2024, J.C. Bose UST, Faridabad, 4-8, January 2024.

29) Manisha, Manvi Siwach ,” Intelligent vision Based safety Assessment system for road users using YOLO , 30th International Conference of International Academy of Physical Sciences (CONIAPS) on Recent Advances in Science & Technology towards Sustainability. JC Bose UST, Faridabad, Haryana. 28-29, February 2024

30) Sushmita Singh , Manvi Siwach, “Labelled Propert Graphs vs RDF Graphs : A comparative study, 30th International Conference of International Academy of Physical Sciences (CONIAPS) on Recent Advances in Science & Technology towards Sustainability. JC Bose UST, Faridabad, Haryana. 28-29, February 2024

31) Sushmita Singh , Manvi Siwach, “Challenges in constructing a knowledge graph from text-based documents, International Conference on Recent Advancements in Communication, Computing and Artificial Intelligence. RACCAI (2024) (SERB Sponsored), Chandigarh Group of Colleges, Jhanjeri, Mohali. 07-08 November, 2024

32) Raveena Aggarwal, Jyoti Verma, Manvi Siwach , Enhancing Storage efficiency of HDFS for small files by Dynamic file Pooling, IEEE conference, Eight international conference on Parallel, Distributed and Grid Computing(PDGC 2024), Jaypee University of Information Technology , Solan ,H.P. 18-20 Dec' 2024

Book Chapters

- Sushmita Singh,Manvi, “Role of Knowledge Graphs in Analyzing Epidemics and Health Disaster”, Global Healthcare Disasters: Predicting the Unpredictable with Emerging Technologies, Apple Academic Press, CRC Group, Taylor & Francis, 2021
- Manvi,Komal Kumar bhatia, Ashutosh Dixit “Automatic Generation of Ontology for Extracting Hidden Web Pages”, Big Data Analytics, Advances in Intelligent Systems and Computing, Springer Nature Singapore Pte Ltd,2018

Convener and Organizer

| | Event | Date |
|------------------|--|--------------------|
| Convener | One week AICTE sponsored STTP, Blockchain Technology and Networks | March 2022 |
| | Saturday Lecture Series for MCA students | July- October 2022 |
| | Value Added Course on Python Programming for all the students of the University | 2021 |
| | Civil Service Forum Panel Discussions | 2021 |
| Organizer | 10th International Symposium on Fusion of Science & Technology (ISFT) | 2024 |
| | 30th International Conference of International Academy of Physical Sciences (CONIAPS) on Recent Advances in Science & Technology towards Sustainability (RASTAS) | 2024 |
| | e-coordination & Invitation Team for Convocation | 2024 |
| | One week FDP sponsored by AICTE Training and Learning (ATAL) Sponsored on Data Science | February 2022 |
| | One week FDP on BIG DATA | July 2021 |
| | One week FDP on BIG DATA | October 2021 |
| | One week FDP on Data Analytics using R | July 2020 |
| | Smart India Hackathon 2021 | 2021 |
| | Aatma Nirbhar Bharat Hackathon | 2020 |
| | 8 th International Symposium on Fusion of Science and Technology (ISFT-2020) | 2020 |
| | Refresher Course on Emerging trends in Computer Sciences | 2018 |

Ph.D. Guiding

Currently supervising two candidates having following topics

- i) **Risk Analysis and Prediction in Epidemic outbreak using Graph Analytics.**
- ii) **Effective Computing techniques for big data in cloud**

M.Tech. Thesis Guided

| S.No. | Name of the student | Title of Thesis | Year |
|--------------|----------------------------|--|-------------|
| 1 | Shilpi Aggarwal | A New Feature Extension Technique For Migrating Crawlers | 2013 |
| 2 | Vikas Goel | Indexing for Hidden Web. | 2013 |
| 3 | Rajiv Mishra | Ontology Mapping Technique | 2014 |

| | | | |
|-----|----------------|--|------|
| 4 | Rinki Kumari | Domain Specific Hidden web Crawler | 2014 |
| 5 | Bhumika Wadhwa | Generating Domain Specific Ontology | 2014 |
| 6. | Jyoti Yadav | Ranking Technique for hidden web. | 2015 |
| 7. | Mohini Goel | Creation of Ontology database | 2015 |
| 8. | Anshu Rathi | Indexing technique for hidden web | 2015 |
| 9. | Swati Gogia | Automatic Query Formulation For Extracting Hidden Web | 2016 |
| 10. | Sushmita Singh | Ontology Based Context Indexing of Hidden Web | 2016 |
| 11. | Shweta Sirohi | Ontology Based Information Extraction Using Web Mining | 2017 |
| 12. | Vipasha Jain | Ranking Based on Review Mining | 2018 |
| 13. | Shivani Garg | Image enhancement | 2018 |
| 12. | Jyoti Bhardwaj | Sentiment Analysis in Messaging System | 2019 |
| 13. | Sagun Sharma | Recommendation System | 2020 |
| 14 | Mohit Verma | Rumour Detection from Social Media | 2021 |
| 15 | Manisha | Automatic Accident Detection and Reporting system using Surveillance and IOT | 2024 |

Personal Details

Date of birth : 14 November 1983
 Sex : Female
 Marital Status : Married