




Faculty proforma



Title	Dr.	First Name	SHARANJIT	Last Name	KAUR	Photograph
Designation	ASSOCIATE PROFESSOR					
Address	Acharya Narendra Dev College, Gobindpuri, Kalkaji, New Delhi-110019					
Phone No Office	+ 91 11 26412547, 26293224					
Residence	NIL					
Mobile	-					
Email/	sharanjitkaur@andc.du.ac.in					
Web-Page	http://andcollege.du.ac.in/?q=departments/computer-science/faculty/8					
Educational Qualifications						
Degree	Institution				Year	
B.Sc.(G) Computer Sc.	Government College, Karnal (Kurukshetra University)				(1989-1991)	
Masters of Computer Application	Thapar Institute of Engineering and Technology, Patiala				(1991-1994)	
Ph.D.	Department of Computer Sc, University of Delhi (Title: Leveraging grid-based synopsis for mining data streams)				(February, 2011)	
Career Profile						
Teaching Experience: 25 years						
<p>A Ph.D. from University of Delhi in the area of "Mining Data Streams", my research areas of interest are data mining, stream clustering, graph mining and social network analysis. I, currently Associate Professor, am teaching at Acharya Narendra Dev College (University of Delhi) since July 1995.</p>						
Administrative Assignments (last 10 years)						
<ul style="list-style-type: none"> • Teacher-in-Charge, Department of Computer Science (2013-2014,2006-2007). • Course coordinator, Physical Sciences with Computer Science (2020-2022) • Co-convener, Workload and Time-Table Committee (2020-2022) • Member, Examination Committee (2018-2020). • Convener, Attendance and IA Committee (2016-2018) • Convener, Core Admission Committee (2016-2018) • Member, Library Committee (2016-2020) • Member Alumni Committee (2014-2016) 						

- Member. IT Committee (2012-2014).
- Member, Time-table & Workload Committee (2010-2012,2013-2014,2014-16).
- Member, FOSS Club (2012-2013).
- Member, Finance Committee (2010-2013).
- Convener, FOSS Club (2010-2012).
- Member, Examination Committee (2010-2012).

Areas of Interest / Specialization

Database management system, Stream mining, Data mining, Graph Mining, Network science

Subjects Taught

Database Management Systems, Operating System, Advanced Database system, Programming using Python, C and C++, Network Science, Visual Basic, Data analysis and Visualization

Research Guidance

PhD students: Two students working in the area of network science as detailed below:

S.NO.	Candidate	Year	Thesis/ Dissertation Submitted	Degree Awarded
1.	Ms. Rakhi Saxena	3 rd Mar 2014	19 th Feb 2019 (Hierarchical Graph Decomposition for Scalable Network Analysis)	August, 2020
2.	Ms. Kirti Jain	18 th Nov 2018	-	-

Supervised MSc Major projects as per given details:

S.No.	Research based Projects title	Students name	Year	Joint Supervisor
1.	Data Mining Algorithms in Startosphere	Tripti Gupta, Dhriti Khanna	Jan-June, 2012	Dr. Vasudha Bhatnagar
2.	Scalable Clustering using MapReduce Programming Model	Abhishek Santra Anurag Agarwal	Jan-June 2013	Dr. Naveen Kumar
3.	Evolution of Author communities in DBLP.	Chavi Jindal, Madhur Maurya	Jan-June, 2014	Dr. Vasudha Bhatnagar
4.	Label Propagation in Large Graphs.	Yashaswi Jindal, Yashika Ahuja	Jan-June, 2014	Dr. Vasudha Bhatnagar
5.	Network Evolution in Co-author networks	Nikita Chopra, Neelam Rohilla	Jan-June, 2015	Dr. Vasudha Bhatnagar

Research Projects Completed:

S. No	Title	PI/ Co-PI*	Duration (in months)	Period (From-to) Dates to be given	Total Grant/Funding received (Rs.)	Name of Sponsoring/ Funding Agency	Outcome of the Project
1	Astronomy using archival data (ANDC-203)	Co-PI	12	Aug 2013- July 2014	4,50,000/	University of Delhi	Paper Publication

Publications Profile**a) Research papers published in Refereed/Peer Reviewed Journals**

1. Rakhi Saxena, Sharanjit Kaur, Vasudha Bhatnagar: Identifying similar networks using structural hierarchy. *Physica A: Statistical Mechanics and its Applications*, 2019. 10.1016/j.physa.2019.04.265.
2. Rakhi Saxena, Sharanjit Kaur, Vasudha Bhatnagar: Social centrality using network hierarchy and community structure. *Data Mining and Knowledge Discovery*, 32(5): 1421-1443 (2018)
3. Vasudha Bhatnagar, Sharanjit Kaur, Rakhi Saxena, and Dhriti Khanna , *DASC: Data Aware Algorithm for Scalable Clustering, Knowledge and Information System (springer)*, 50 (3), 2017. (851-881)
4. Sharanjit Kaur, Rakhi Saxena, and Vasudha Bhatnagar: Leveraging Hierarchy and Community Structure for Determining Influencers in Networks. *DaWaK 2017, LNCS 10440*, 2017. (383-390)
5. Vasudha Bhatnagar, Rakhi Saxena, Sharanjit Kaur, Debasis Dash. Leveraging Structural Hierarchy for Scalable Network Comparison, *DEXA 2016, LNCS 9827*. (287-302)
6. Vasudha Bhatnagar, Sangeeta Ahujha and Sharanjit Kaur, Discriminant Analysis-based Cluster Ensemble, *International Journal of Data Mining, Modeling and Management*, vol:7, issue:2, 2015, Inderscience. doi: 10.1504/IJDM.2015.069248.
7. Aniruddha Dey, Sukanta Deb, Subhash Kumar, Hrishabh Bharadwaj, Barnmoy Bhattacharya, Richa, Angad Sharma, Akshyata Chauhan, Neha Tiwari, Sharanjit Kaur, Suman Kumar, Abhishek : Light curve modeling of eclipsing binaries towards the constellation of Carina, *DU Journal of Undergraduate Research and Innovation*, 1, 2015. (60-78)
8. Vasudha Bhatnagar, Sharanjit Kaur and Sharma Chakravarth: Clustering Data Streams using Grid-based Synopsis, *Knowledge and Information System* , 41(1), 127-152 (2014)
9. Vasudha Bhatnagar, Sharanjit Kaur, Laurent Mignet, A Parameterized Framework for Stream Clustering Algorithms, *Int'l Journal for Data Warehousing and Mining*, 5(1), 36-56 (2009).

10. Vasudha Bhatnagar, Sharanjit Kaur, Ajit Chaturvedi, Gradation Framework for Anomaly Detection in Streams, ISAST Transactions on Intelligent Systems, 1(1), 2008.

b) Research papers published in Refereed/Peer Reviewed Conferences

1. Sharanjit Kaur, Rakhi Saxena, Dhriti Khanna and Vasudha Bhatnagar: Comparing Data Processing Frameworks for Scalable Clustering, FLAIRS 2014, Association for the Advancement of Artificial Intelligence (Florida) 21.05.2014 – 23.05.2014, isbn: 978-1-57735-658-5.
2. Sharanjit Kaur, Dhriti Khanna, Tripti Gupta and Vasudha Bhatnagar: Scalable Clustering Using PACT Programming Model. ICDM Workshops 2012 (Brussels, Belgium), 424-430. 10.10.2012, doi:10.1109/ICDMW.2012.78. 978-1-4673-5164-5. 2375-9232.
3. Sharanjit Kaur, Vasudha Bhatnagar, Sameep Mehta and Sudheer Kapoor, Categorizing Concepts for Detecting Drifts in Stream, In Proceedings of 15th International Conference on Management of Data (Mysore, India), 9.12.2012-12.12.2009.
4. Vasudha Bhatnagar, Sharanjit Kaur, Neelima Gupta, Identifying Informative Dimensions in Streaming Clusters, In Proceedings of IEEE ICIS'09 (China), 1.06.2009 – 3.06.2009. doi: 10.1109/ICIS.2009.95. 978-0-7695-3641-5
5. Vasudha Bhatnagar, Sharanjit Kaur, Exclusive and Complete Clustering of Streaming Data, In Proceedings of Int'l Conference on Database and Expert System Applications, (DEXA'2007), Sept 3 – 7, 2007 Regensburg, Germany, pp 629-638. © LNCS 4653 . doi: 10.1007/978-3-540-74469-6_61.

c) Book Chapters

1. Sharanjit Kaur, Vasudha Bhatnagar, and Sharma Chakravarthy: Stream Clustering Algorithms: A Primer, BIG DATA in Complex systems: Challenges and opportunities, 2015 , Springer . Doi: 10.1007/978-3-319-11056-1_4.
2. Sharanjit Kaur, Outlier Detection, Encyclopedia of Data Warehousing and Mining, 2009,1476-1482, IGI Global.
3. Deepali Aggarwal, Pankaj Singhal, Sharanjit Kaur, Vasudha Bhatnagar PDOD: Tree Based Algorithm For Outlier Detection, ACVIT 2007, IK International Publishing House Pvt Ltd, New Delhi 978-

d) Tutorial given

1. Vasudha Bhatnagar, Sharanjit Kaur Clustering Data Streams: A Second Look, COMAD 2011, 19-21 Dec 2011, Bangalore, India.

e) Books authored as a member of development team

S.No.	Title of Edited Book	Title of Chapter	Authorship*	Publisher (with city/country & year of Publication)	ISBN	Whether Refereed
1.	Textbook for XI Computer Science	-	Joint Author*	NCERT, 2019	978-93-5292-117-1	Textbook CBSE
2.	Textbook for XI Informatics Practices	-	Joint Author*	NCERT, 2019	978-93-5292-148-5	Textbook CBSE
3.	Textbook for XII Computer Science	-	Joint Author*	NCERT, 2020	978-93-5292-338-0	Textbook CBSE
4.	Textbook for XII Informatics Practices	-	Joint Author*	NCERT, 2020	978-93-5292-361-8	Textbook CBSE

Conference / Presentations /Workshops**Lectures delivered as a resource person (in FDP/RC/Workshop):**

- A technical talk (virtual) on 'Basics of Python' (11th oct, 2020) organized by Thapar Mathematical Society at Thapar Institute of Engineering & Technology, Patiala, Punjab
- Online lecture and hands on session on 'Introduction to Pandas and Hands-on' in On-line Workshop on Data Analysis and Visualization of Covid-19 Data using Python (22-26 June,2021) at Acharya Narendra Dev College on June 24th, 2021
- FDP on 'Emerging Trends in Machine Learning Technologies' (20-25th January,2020) conducted by Department of Computer Science and Engineering, Guru Jambheshwar University of Science and Technology, Hisar on 23rd Jan, 2020
- FDP on 'Recent Advances in Research Methodology' (17-28th January,2020) conducted by Teaching Learning Centre, Ramanujan College (under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme) on 27th Jan, 2020
- Delivered lecture on 'Python Programming' in In-service course for PGTs (CS) of Kendriya Vidyalaya on 24th Dec, 2018 at KVS-no. 2, Delhi Cantt

- Delivered lectures in FDP on Network Science: Foundation of Social Network Analysis (3-8th Dec, 2018) on days 4th Dec and 6th Dec, 2018 organized by TEACHING LEARNING CENTRE of Ramanujan College & Department of Computer Science, (University of Delhi)
- Taught 3-days course on "Network Science: Foundation of Social Network Analysis" during period 13.12.2018 to 15.12.2018 at Epitech University, PARIS
- Workshop on "R Programming" conducted by Department of Computer Science, (University of Delhi) on Monday, 12th Feb, 2018
- Two Week AICTE approved and funded Faculty Development Program (FDP) on Big Data Analytics from 20-Nov-2017 to 02-Dec-2017 on the topic of Graph analytics on 28th Nov,2017 during at Department of CSE-Geethanjali College of Engineering and Technology Cheeryal (V), Keesara (M) Medchal (Dist), Hyderabad -Telangana.
- 3-days workshop on "Research Methodology and Scientific Writing" (RMSW2017) from 15th March 2017 to 17th March 2017 held at NSIT, Delhi on the topic of Data analytics using R on 17th, Mar 2017
- 1-week FDP on Big data Analytics at ITS Engineering College, Greater Noida (9-13 Jan 2017) talk delivered on 12th Jan, 2017
- Delivered expert lecture on Graph Analytics using R in one-week FDP on innovation and Recent trends in Data Analytics on 31st, Dec, 2016 (26-31 Dec ,2016) at Deptt of Computer Sc, Banasthali Vidyapeeth Univ, Jaipur
- Conducted two sessions on "Data Sciences and Machine learning" in 6 days FDP at Bharti Vidyapeeth College of Engineering, Paschim vihar on 9th Nov 2016
- Delivered two expert lectures at Manav Rachna International University ,Faridabad) during FDP on Big data analytics on June 9th,2016 (6-17 June,2016)
- Weka tool on data mining in Refresher Course in Computer Science conducted by CPDHE, Jan 2010.

Research Projects (Major Grants/Research Collaboration)

Name of the Project: Astronomy using Archival Data (ANDC-203)

Position in the Project: Principal Co-Investigator

Duration: 2013-14

Research Agency: Innovation Project, University of Delhi

Awards and Distinctions

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Association With Professional Bodies

- Lifetime Membership of CSI

Reviewer:

- On the editorial board of International Journal of Data Mining, Modelling and Management, Inderscience (2012-2016)
- Reviewed papers for international conference TECHON 2019,
- Reviewed papers for international journal Knowledge and Information Systems, Springer in 2017,2018, 2019,2020,2021
- Reviewed papers for international journal IEEE Access 2019

Other Activities

- Involved in course designing and setting guidelines for papers of B.Sc.(H) Computer Sc, Applied Physical Science and PGDCA as a member of Academic Committee of Undergraduate Courses" (2002-2006) and "Committee of Post-Graduate and Honors Courses & Research" (2004-2006) in Department of Computer Science, University of Delhi.
- Member, Revised Syllabus (CBCS), Bachelor of Science (Hons.) Computer Science (w.e.f. 2019)
- Member, Revised Syllabus (CBCS), Computer Science Courses for Physical Science/ Mathematical Science (w.e.f. 2019)
- Part of different meetings organized by National Institute of Electronics and Information Technology, Delhi
- Organized and attended different training programmes

SHARANJIT KAUR

Signature of Faculty Member