

PROFILE (Updated September 2021)

Name **Dr. Nidhi Arora**



Designation Associate Professor

Department Computer Science

Address (Official) Kalindi College, University of Delhi,
East Patel Nagar, New Delhi-110005.
India

Phone No. 9818459898

Email nidhiarora@kalindi.du.ac.in

Educational Qualifications

Subject	Institution	Year	Details
Ph.D. (Computer Science) Thesis Title <i>“<u>Enhancing Group Search Optimization Algorithm for Structural Analysis of Small Scale Networks</u>”</i>	Department of Computer Science, University of Delhi	Awarded in June 2019	Under the Guidance of Prof Hema Banati, Dyal Singh College, University of Delhi
M.Phil (Computer Science) Thesis on “ <i><u>Survey of Algorithms for Identification of Transcription Modules in Microarray Data</u></i> ”	Madurai Kamaraj Univ, Madurai	Awarded in 2010	First Division
Masters of Computers Applications(MCA)	MD Univ, Rohtak.	2004	First Division
Masters in Information Technology (MIT)	MCRP Univ, Bhopal	2001	First Division
B.Sc. (Comp. Sc.)	Keshav Mahavidyalaya, University of Delhi	1999	First division

Career Profile

Total Teaching Experience : (2001-2021)- 19+ years

Organisation	Designation	Duration	Role
Kalindi College	Associate Professor	23 rd August 2018- till date	Teaching, Research and Administrative Activities
Kalindi College	Senior Assistant Professor	23 rd August 2015- 22 nd August 2018	Teaching, Research and Administrative Activities
Kalindi College	Assistant Professor - Permanent	23 rd August 2010- 22 nd August 2015	Teaching, Research and Administrative Activities
Keshav Mahavidyalaya, DU	Assistant Professor(Adhoc)	1 st Nov 2001 to 23 rd August 2010	Teaching

Research Interests/Specialization

Evolutionary Algorithms, Social Networks, Data Structures, C++.

Administrative Assignments / Contribution to corporate life

2021-22

- Teacher In charge, Department of Computer Science, Kalindi College.
- Convener of the committee for Development of Management Information System (MIS) in Kalindi College.
- Convener – E-waste Disposal Committee.
- Convener – Kalindi College Repository Committee.
- Convener- Technical Committee, Kalindi College Annual day , August 2021.

March 2020- 2021

- Teacher In charge, Department of Computer Science, Kalindi College, March 2020 onwards
- Nodal Officer, OBE, August 2020- October 2020.
- Convener- Criteria 4, NAAC committee 2020.
- Convener- Technical Committee, Orientation Day 20-21
- Convener- Technical Committee, Annual day 2019-20
- Convener- National level FDP on “Moving Towards New Normal with Effective Online Teaching” Organised by Department of Computer Science, Kalindi College held on 1st -7th December, 2020.

2018-19	<ul style="list-style-type: none"> Deputy Co-Ordinator, Central Evaluation Centre, Kalindi College (May-September 2018) Member of Committee of Undergraduate Courses, Department of Computer science, University of Delhi. Convenor, Cultural Program, Farewell 2019
2013-2014, 2017	<ul style="list-style-type: none"> Member, Purchase Committee
2017-19	<ul style="list-style-type: none"> Convenor, E-waste Committee Co-Convenor, Repository Committee
2014	<ul style="list-style-type: none"> Member, Core Committee, Admissions Convenor, ECA admission Committee Superintendent, Written+ Skill Test, JACT(Contract), Kalindi College
2012-13	<ul style="list-style-type: none"> Convenor, Cultural programme, Annual Day
2013	<ul style="list-style-type: none"> Co-Convenor, ECA admission committee
6th Aug 2012-20th Nov 2012 1st May 2013-30th July 2014	<ul style="list-style-type: none"> Teacher-In-Charge, Department of Computer Science, Kalindi College
2012,2013, 2014,2018,2019	<ul style="list-style-type: none"> Convenor, Inter College Cultural Festival Lehren
2012-13	<ul style="list-style-type: none"> Member, Cultural Council, Univ of Delhi
2011-12	<ul style="list-style-type: none"> Member, Examination Committee Convenor, Prize Distribution Committee, Annual Day Member , ECA admission Committee Co-Convenor, Lehren, Kalindi College Cultural Festival Co-ordinator, Physcom Society Convenor, Seating and Shamiana Committee, Alumni Day

Subject/Courses Taught

Courses Taught

- B.Sc. (H) Computer Science, B.Sc. (Physical Sciences), B.Sc. (G) Computer Science, PGDCA, BIS, BIT

Subjects Taught

- Programming Languages – C++, Java, Algorithms, Data Structures, Computer Networks, Multimedia and Database Management Systems, Machine Learning.

Publications (Peer Reviewed/Indexed Journals)

Year of Publication	Title	Journal (Name of the journal. Vol Issue ISSN)	Co-Author
2018	Arora, N. and Banati, H., 2018. IM-GSO: A Community Directed Group Search Optimization Approach for	<i>Cybernetics and Systems</i> , 49(7-8), pp.497-520. Indexed : Scopus, ESCI	Hema Banati

	Influence Maximization. <i>Cybernetics and Systems</i> , 49(7-8), pp.497-520.	Impact Factor - 1.8 (2020)	
2018	Significance of Social Media in Learning and Growth of Youth: A Case Study of a Women Undergraduate College of India	<i>International journal of basic and applied research</i> , September 2018 UGC Approved (UGC list number 64041), P-ISSN 22493352, E-ISSN 22780505	Reena Jain, Vandana Gupta, Aarushi, Mink Singh Chauhan, Shivani Yadav, Pallavi Pal, Umang Aggarwal, Swati Basu
2016.	Detecting communities in complex networks-A discrete hybrid evolutionary approach	<i>International Journal of Computers and Applications</i> , Taylor and Francis, 38(1), pp.29-40. Indexed : Scopus Print ISSN: 1206-212X Online ISSN: 1925-7074	Hema Banati
2016	Multiobjective Group Search Optimization Approach for Community Detection in Networks	<i>International Journal of Applied Evolutionary Computation (IJAEC)</i> , IGIglobal publishers, 7(3), pp.50-70. Indexed : DBLP, ACM ISSN: 1942-3594 EISSN: 1942-3608	Hema Banati
2014	“Enabling Inclusive Education in Structured Learning Environments through Social Network Analysis”	<i>International Journal of Innovation in Education</i> , 2(2/3/4) PP. 151-167, Inderscience. Indexed: Google Scholar, Inspec, ISSN-1755-1528.	Hema Banati
2011	“Clustering in Microarray Data”	Yearly Academic Journal, Kalindi College, Vol 10, PP.96-108, ISSN-2348-9014	-
2012	“Biometrics – A concern for Security”	Yearly Academic Journal, Kalindi College, Vol 11, PP.160-167. ISSN-2348-9014	-

Seminar/Workshop/Conferences Presentation

1. Nidhi Arora, Reena Jain, Vandana Gupta, Umang Aggarwal, Chetna Gupta, Mahima Kumari, Naina Chaudhary, Pankhuri Jain, Rekha Pal Investigating factors influencing scholastic execution at undergrad level using network analytics, Presented in [ICAICR '19](#) Third International Conference on Advanced Informatics for Computing Research Shimla, India — June 15 - 16, 2019, Proceedings in ACM-DL, ISBN: 978-1-4503-6652-6 doi>[10.1145/3339311.3339319](#)
2. Nidhi Arora¹, Reena Jain², Vandana Gupta³, Aarushi⁴, Mink Singh Chauhan⁵, Shivani Yadav⁶, Pallavi Pal⁷, Umang Aggarwal⁸, Swati Basu⁹, “Youth and Social Media: A Case Study of Kalindi College for Women”, Paper presented at “*International Conference on Empowering Women: Fostering*

Entrepreneurship, Innovation and Sustainability” jointly organised by SRCC and NITI Aayog on 16-17 July 2018 , IIC, Delhi.

3. Nidhi Arora and Hema banati, “A Framework to Mine Communities Using Nature Inspired Algorithms”, *IEEE International Conference on Research in Computational Intelligence and Communications Networks (ICRCICN)*, 2016a .
Electronic ISBN: 978-1-5090-1047-9
CD-ROM ISBN: 978-1-5090-1045-5
USB ISBN: 978-1-5090-1046-2
Print on Demand (PoD) ISBN: 978-1-5090-1048-6
4. Puja Munjal, Nidhi Arora, Hema Banati , “ Dynamics of online Social Networks based on parametric variation of relationship” , in *IEEE International Conference on Research in Computational Intelligence and Communications Networks (ICRCICN)*, 2016b.
Electronic ISBN: 978-1-5090-1047-9
CD-ROM ISBN: 978-1-5090-1045-5
USB ISBN: 978-1-5090-1046-2
Print on Demand(PoD) ISBN: 978-1-5090-1048-6
5. Nidhi Arora and Hema Banati, 2016c, “Enhancing Group Search Optimization with Node Similarities for Detecting Communities”. In *The International Symposium on Intelligent Systems Technologies and Applications* , 2016, pp. 303-316. Springer International Publishing.
Print ISBN- 978-3-319-47951-4.
Online ISBN- 978-3-319-47952-1
6. Hema Banati and Nidhi Arora, 2015a. “TL-GSO: - A Hybrid Approach to Mine Communities from Social Networks”, in Proc. of *IEEE International Conference on Research in Computational Intelligence and Communications Networks (ICRCICN)*, 2015, pp. 145-150, IEEE.
Electronic ISBN: 978-1-4673-6735-6
CD-ROM ISBN: 978-1-4673-6734-9
7. Hema Banati and Nidhi Arora, 2015b. “Modeling Evolutionary Group Search Optimization Approach for Community Detection in Social networks” , in Proceedings of the *Third Int. Symposium on Women in Computing and Informatics*, 2015, pp. 109-117, ACM.
ISBN: 978-1-4503-3361-0

Book Chapters Published/Books Edited

1. Book: Emerging Trends in Information Technology, 2019, Editor- Dr. Nidhi Arora, Publisher- Bloomsbury India, ISBN: 978-93-89165-99-9
2. Arora, N. and Banati, H., 2017. GSO Based Heuristics for Identification of Communities and Their Leaders. In *Hybrid Intelligence for Social Networks* (pp. 99-127). Springer, Cham.
3. Author of Chap 1-Threaded Trees, BSc.(H)Comp Sc II sem , ILLI , University of Delhi, ISSN-2349-154X.
4. Author of Chap 2- M-way Trees, BSc.(H)Comp Sc II sem , ILLI , University of Delhi, ISSN-2349-154X.

Seminar/ Conference/Workshop Organised

- Convener- National level FDP on “Moving Towards New Normal with Effective Online Teaching” Organised by Department of Computer Science, Kalindi College held on 1st -7th December, 2020
- Convener- UGC Sponsored National Conference on Emerging Trends in Information Technology held on 1st and 2nd August 2019 at Kalindi College.
- Organised a Students Webinar on “Managing Psychological Lockdown” in Kalindi College, Speaker, Dr. Shivani from Aryabhata College on 6th May 2020.
- Convener, Webinar on Importance Of Machine Learning & Data Science In Today’s World ,Kalindi College, September 4, 2020
- Convener, Inter-College Technical Fest – TECHNOPHILIA ,UG, Kalindi College, October 6, 2020
- Convener, Webinar on Cyber security, Kalindi College, January 16, 2021
- Convener, Inter-College Technical Fest – TECHNOPHILIA 2.0 , Kalindi College, February 26, 2021
- 2011-12, Organised Seminar on “ Developing Intelligent Machines Using Fuzzy Logic” By Dr. Devendar Tayal at Kalindi College on 26th August 2011, Kalindi College

FDP/Workshop/Trainings/Courses Attended

- Attended One week FDP on Exploratory Data Analysis using Statistical Software R and SPSS” organised by Department of Statistics and Internal Quality Assurance Cell (IQAC) Mata Sundri College for Women, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi. 07th January - 13th January, 2021
- Completed Two week FDP on managing online classes and co-creating MOOCs Organised by Teaching Learning Centre, established under the Pandit Madan Mohan Malaviya National Mission on Teachers and Training scheme of MHRD, Ramanujan College (University of Delhi) from 20th April to 6th May 2020
- One week workshop on E-contents Development and Online Pedagogy CPDHE, DU 23rd May 2020 to 29th May 2020
- One week FDP on Algorithms Department of computer science, University of Delhi 7th July 2016- 13th July 2016
- Workshop on Data Analytics and its Security Issues at Jaypee Institute of Information Technology, Noida, 4th December 2015-5th December 2015
- Refresher course (Three weeks course) CPDHE, Delhi 14 December 2013 to January 4, 2014 (Three weeks course)
- Completed E-Learning course on Social Network Analysis from Course-era on May 8, 2013.
- Orientation Course OR-69 (4 week) CPDHE, ILL, Univ. of Delhi, 13th Dec 2011 to 9th Jan 2012
- Ref. Course in Comp. Sc. & Inf. Tech.- (4 week), ASC, JNU, 29th August 2011 to 23rd Sep 2011
- Teacher Training Programme in algorithms Department of computer science, University of Delhi 20-25th April 2009
- Workshop on Ethical Hacking and Information Security, Keshav mahavidyalaya, 20-21 august 2009
- VLDB Summer school on Frontiers of Database Technology,IIT, Delhi, 1st June 2004 to 4th June 2004,IIT, Delhi

Awards & Distinctions

- Have additionally qualified J and K State Level Eligibility Test (Computer Science) for Lecturer-ship held on 7th August 2005.
- Qualified UGC-NET (2006) in Computer Science.

University Service/ Consulting Activity/ Resource Person/ Invited Talks

- Resource person and presented the topic “Getting acquainted with Google services -Google Drive, Google form , Google slide, Google website.” under the session/sub-session” in national level FDP on “Moving Towards New Normal with Effective Online Teaching”” Organised by Department of Computer Science, Kalindi College held on 1 st -7 th December, 2020, at Mahatma Hansraj Faculty Development Centre, Hansraj College (online).
- Resource person and presented the topic “Getting acquainted with Google services -Google Drive, Google form , Google slide, Google website.” in national level FDP on “E-Content Generation and Managing Online Teaching" Organised by Aurbindo College held on 11th - 17th December, 2020, at Mahatma Hansraj Faculty Development Centre, Hansraj College (online).
- Resource person and presented two topics ““Utilizing Google services for effective online teaching” & “Google sites and open source software for lecture recording” in national level FDP on “Online Teaching Tools” Organised by Mahatma Hansraj Faculty Development Centre, Hansraj College in collaboration with PARAMARSH, UGC SCHEME held on 16th February – 22nd February, 2021, at Mahatma Hansraj Faculty Development Centre, Hansraj College (online).
- Resource person and delivered a session on “*Data Science What, Where, How a brief Overview*” in national level Faculty Development Program on Data Science Organised by Department of Computer science and Applications, Makhnalal Chaturvedui University of Journalism and Communication, Bhopal in collaboration with AICTE held on 7th to 11th September , 2020, (online).
- Session Chair: Chaired a session in International Conference on Advances in Smart Materials and Emerging Technologies organized by IGDTUW held on Jan 23-24, 2020 at IGDTUW , Delhi
- Resource person in a Seminar on “Current IT trends”, organised by Makhnalal Chaturvedi National University, Bhopal on 29th November 2017.
- TPC committee member in First International Conference on Advanced Computational and Communication Paradigm held at Skkim Manipal Institute of Technology, Skkim, India during 8-10 Septemeber 2017.
- Resource person for Inter-College “Skill Enhancement Workshop for Laboratory Staff” held at Kalindi College (University of Delhi) on 13-14 March, 2018.
- Reviewer of International Journal “IEEE Access”, Feb 2019 . IEEE Access has an impact factor of 3.557, an Eigenfactor of 0.0186, and an article influence score of 1.098 (per 2017 JCR).

Minor Projects Undertaken (Funded)

1. 2017-18: “Social Media for Youth: A Boon or a Bane”,Funded by Kalindi College (KC/2017/03) - Principal Investigator- Completed , Six undergraduate students involved

2. 2018-19: "Analysing Real World Relationships Through Network Analytics, Funded by Kalindi College - Principal Investigator- Completed, Six undergraduate students involved"