Title	DR.	First Name	SUNITA	Last Name	NARANG	Photograph
Designation		**Associate Professor**				
Address		**Department of Computer Science** **Acharya Narendra Dev College** **Govind Puri, Kalkaji, New Delhi-110019.**				
Phone No (off)		**011-26412547**				
Email/		**sunitanarang@andc.du.ac.in**				

Educational Qualifications

Degree	Institution	Year
PhD	**Faculty of Management Studies, University of Delhi, India**	**2013**
MCA	**School of Computer & System Sciences, Jawahar Lal Nehru University, India**	**1997**
B.Sc. (H) Physics	**Hindu College, University of Delhi, India**	**1994**

Career Profile

Dr. Sunita Narang is a diligent teacher with keen interest in understanding and learning new technologies. She holds doctorate degree in an inter-disciplinary area of Financial Derivatives from Faculty of Management Studies (DU). With over 23 years of teaching experience to her credit, she has presented papers at various seminars/conferences at national/international level. She started FOSS culture in college in the year 2007 and has been organizing workshops every year for newly admitted students and teaching/non-teaching staff of college. She was primary investigator in one and co-investigator in two, trans-disciplinary DU innovation projects which involved undergraduate students. For one of the project titled "Artificial Olfaction using e-nose – mimicking human nose for gas sensing applications", she has been awarded **"Teaching Excellence Award for Innovation"** in the year 2015

Administrative Assignments

At Department Level :

- Convener, Alumni Committee (2020-24)
- Convener, Foss Club (2007-10, 2012-14, 2018-20, 2022-24)
- TIC/Member, Admission Committee (2006-10, 2012-14, 20-24)
- Convener/Member, Stock Verification Committee (2007-11, 2020-24)
- TIC/Member, Purchase Committee (2006-10, 2020-24)
- TIC, Workload and TT Committee (2020-22)
- TIC, Orientation Committee (2020-22)
- Teacher-in-charge, Computer Science (2007-09, 2020-22)
- Convener/Member, Turing Society (2006-10, 12-14)

At College Level :

- Convener (2016-18)/Member (2006-14,18-24), IT Committee
- Member, Mentoring and Counselling Committee (2022-24)
- Member, College Development Committee (2011-14, 18-20)
- Member, Environment Society (2016-18)
- Member, Examination Committee (2014-16)
- Member, Finance Committee (2014-16)

- Member, Alumni Affairs Committee (2012-14)
- Member, Annual Events Committee (2008-10)
- Member, Website Development Committee (2008-10)
- Member, Social Outreach Programs Committee (2006-08)
- Member, Women Student's Affairs Committee (2006-08)

At University Level :
- Member, curricula development committee, B.Sc. (H) Computer Science (2022)
- Member, Syllabus revision committee, B.Sc. Physical Science (2018)
- Member, Curriculum development committee, B.Tech. (2012)
- Member, Curriculum development committee, PGDCA (2009)

Areas of Interest / Specialization

- Recommender Systems
- Digitization, Digital Empowerment
- Financial Derivatives, Asymmetric GARCH Models,
- Operating Systems (Linux), Database Management Systems, Systems Software, Web Designing

Subjects Taught

Post-Graduation Level:
- Advanced Operating Systems (MCA)
- Computer System Architecture, Operating Systems (PGDCA)

Under-Graduation Level:
- Database Management System
- Operating Systems
- Web Designing
- Theory of Computation
- Systems Software

Research Guidance

Publications Profile

Publications in Peer Reviewed Journals:
- Ahuja, H., Narang, S., Kaur, S., Saxena, R. (2022), 'Entropy for item inclination in sub-community-based recommender system', International Journal of Advanced Technology and Engineering Exploration, 9(93), 1111-1133.
- Narang S. et al. (2021), 'Perception of Youth on Digital India', International Journal of Business Innovation and Research, 25(3), 365-388.
- Chowdhuri A., Narang S., et al. (2014), "Low cost 'Smart' switch for designing Electronic Nose (E-Nose) for gas sensing applications", Journal of Advanced Research in Electrical and Electronic Engineering (AREEE), 1(1), 35-37.
- Chowdhuri A., Narang S., et al. (2014), "Using mobile phones with android OS for measuring hazardous gas concentrations detected using Electronic Nose (E-Nose)", Journal of Advanced Research in Electrical and Electronic Engineering (AREEE), 1(1), 25 –27.
- Narang S., Vij M. (2013), 'Long-Term Effects of Expiration of Derivatives on Indian Spot Volatility', ISRN Economics, Article Id – 718538.
- Narang S., Vij M. (2013), 'Long-term impact of derivative trading on volatility of Indian capital market with special emphasis on crisis period', Global Journal of Finance and Management, 5(11), 44-49.
- Narang S., Bhalla V. K. (2012), 'Re-examining the Nifty returns after the first decade of derivative trading in Indian capital market using non-linear asymmetric GARCH models', International Journal of Innovations in Digital Economy, 3(4), 29-52.
- Narang S., Bhalla V. K. (2011), 'Risk-Return Trade-Off in Indian Capital Market During Last Two Decades with Special Emphasis on Crisis Period', Annals - Economic and Administrative Series, 5(1), 77-98.

Conference/ Presentations/Workshops

Conference Paper Presentations:
- Corresponding author for a paper titled 'CHAR-TOPSIS: A novel approach to rank Asian countries for safety measures during Covid-19 pandemic' which was presented at International conference on Mitigating environmental issues by sustainable approaches (ICMCESA-2022) on 22-28 February 2022 at ANDC under the aegis of IQAC and DBT Star College Scheme.
- Principal author for a paper titled 'Comparative analysis of flood vulnerability techniques for detecting area specific indicators' which was presented at International conference on Mitigating environmental issues by sustainable approaches (ICMCESA-2022) on 22-28 February 2022 at ANDC under the aegis of IQAC and DBT Star College Scheme.
- A paper titled 'A Proposed Entropy based Recommender Framework for Disaster Management' was published in the proceedings of online 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO, 2021) (pp. 1-6). IEEE.
- A paper titled 'Biometric Attendance System' was presented at International Conference on "Development of Economies through Innovation & Sustainable Growth: Vision 2020" (IC-DEISGV – 2016) on 15-16 Oct, 2016 at IHM, Pusa, New Delhi in collaboration with International Association of Research & Development Organization.
- A paper titled 'Perception of Student Community on Digital India' was presented at National Seminar on "Make in India – Prospects and Challenges" on March 30, 2016 at Sri Guru Nanak Dev Khalsa College, University of Delhi.
- Presented a paper titled 'Long-Term impact of Derivative Trading on Volatility of Indian Capital Market with special emphasis on Crisis Period' in World Congress on 'Business, Finance, Marketing and Industrial Management for Sustainable Development' in May 2013.
- Presented a paper titled 'Risk-Return Trade-Off in Indian Capital Market During Last Two Decades with Special Emphasis on Crisis Period' in International Conference in Economics and Administration, ICEA 3-4 June 2011.

Conferences/FDP/Workshops/ Seminars Organized:
- Convener, organized a 12-hour workshop on Bootcamp VLab development on HTML, CSS and JS from 9-14 January, 2023 by students of ANDC, under DBT Star scheme, 2022-23.
- Convener, organized a two-Day workshop for students and faculty members on MATLAB on 12 & 17 October, 2022 by Mr. Manoj Kumar (Applications Engineer at DesignTech Systems Pvt. Ltd.), under DBT Star Scheme, 2022-23.
- Convener, organized a two-Day online workshop on *"HTML: A Prerequisite for MERN Stack"* on 6-7 Oct. 2021 by Mr. Rishi Sarbobhoum, Mr. Aditya Goyal, Mr. Devesh Yadav, Mr. Sushant Sharma, Students, ANDC, under DBT Star Scheme, 2021-2022
- Convener, organized a two-Day online workshop on "Effective Presentation & Image Management for Success" on 24-25 Aug. 2021, by Mrinal Gupta Virmani, Confidence Coach & Soft skills Trainer, Image Consultant & Chartered Accountant, under DBT Star Scheme, 2021-2022
- Convener, organized a Webinar on "Role of IT in Indian Banking System" on 14th July, 2021. Speaker was Professor Madhu Vij, Former Professor in Finance, Faculty of Management Studies, University of Delhi, Delhi, under DBT Star Scheme, 2021-2022
- Convener, organized Alumni Meet on 4th July, 2021 for Department of Computer Science.
- Coordinator, organized a webinar on 15th June, 2020, on the topic "Unraveling the Social Network of COVID-19 in India from 30th Jan. to 6th Apr. 2020". Speaker was Dr. Sarita Azad, Assistant Professor, School of Basic Sciences, IIT Mandi, Himanchal Pradesh.
- Convener, organized a four-day (16-19 Sept, 2019) workshop on "Linux and FOSS" for first year students in college premises.
- Convener, organized a one-day (18th Sept, 2018) workshop on "Awareness on Digital India Initiative" in college premises.
- Convener, organized a four-day (28th Aug to 4th Sept 2018) workshop on "Linux and FOSS" for first year students in college premises.
- Convener, a three-day (Aug 2017) workshop on "Linux and FOSS", for first year students in college premises.

- Convener, organized a one-day (11th Apr 2016) Faculty Development Program on 'Digital India Initiative' in association with Centre for Development of Advance Computing, Pune, for Teachers, Academicians & Researchers.
- Convener, organized a four-day (Aug, 2015) workshop on "FOSS & Linux Familiarization" for first year students in college premises.
- Member of organizing committee of a three day (Mar, 2014) "FOSS Familiarization" workshop for the students of first year FYUP course in association with Institute of Informatics and Communication, University of Delhi, South Campus, conducted in college premises.
- Convener, organized a four-day (Dec, 2013) workshop on "IT Tools" for Non-Teaching staff in college premises.
- Convener, organized a three-day (Sept, 2013) workshop on "Ethical Hacking" for students in college premises.
- Convener, organized a two-day (Aug, 2013) workshop on "FOSS & Linux" for first year students in college premises.
- Member of organizing committee for one-day (2nd Feb, 2012) workshop on 'Foss and Linux using spoken tutorials' for students.
- Member of Organization Committee of a two-day (13th Oct, 2011) workshop on "Spoken Tutorials on Latex" by IIT Mumbai" held in college premises.
- Convener, organized a two-day (Aug, 2011) workshop on FOSS for students.
- Member of Organization Committee of a one-day (16th Apr, 2010) workshop on "Open-Source Software (FOSS): Awareness & Possibilities" in South Campus, University of Delhi.
- Member of Organization Committee of a two-day (14-15 Apr, 2010) workshop on "Application of Open-Source Software in Science Teaching & Research" in association with NRCFOSS, Anna University Chennai in college premises.
- Convener, organized a two-day (Jan, 2010) workshop on "Importance of FOSS in IT industry, career prospects, basics of kernel & its security, socket programming & Jquery", in college premises.
- Convener, organized a one-day (Jan, 2009) workshop on "FOSS, OpenMoku and Ruby on rails" held in college premises.
- Convener, organized a five day (Jan, 2009) inter-college training and familiarization workshop on 'Linux, Foss & Clustering'.

Conferences/FDP/Workshops/ Seminars/Refresher Course Attended:
- One-week online National Faculty Development Program on "Visual Communications, Photography, Graphic Design & Animation and Digital Film Production" jointly organized by University of Delhi and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education from 4-11 November, 2022. This FDP covered the following Skill Enhancement Courses (SECs) of DU as introduced in Academic Session 2022-23 under NEP-2020. 1. SEC: Visual Communication and Photography 2. SEC: Digital Film Production 3. SEC: Graphic Design and Animation.
- One-week online National Faculty Development Program on "Back-end, Front-end Web design & Development and App development using Flutter" jointly organized by University of Delhi and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education from 27th October to 3rd November, 2022. This FDP covered the following Skill Enhancement Courses (SECs) of DU as introduced in Academic Session 2022-23 under NEP-2020. 1. SEC: Back-end Web Development 2. SEC: Front-end Web Design and Development 3. SEC: APP Development using Flutter
- Two-week Faculty Development Program on "Managing Online Classes & Co-Creating MOOCs (Level 2) under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Human Resource Development (MHRD) held from 02-16 June, 2021 conducted by Teaching Learning Centre, Ramanujan College, University of Delhi (DU), New Delhi.
- One-week Faculty Development Program on "E-Learning and Developing MOOCs for Teaching Process in Higher Education" held from 14-20 December, 2020 conducted by Teaching Learning Centre, Ramanujan College, University of Delhi (DU), New Delhi in association with Department of Statistics & IQAC, Hindu College, University of Delhi, Delhi.
- One-week Faculty Development Program on "Machine Learning in Research" under Pandit Madan Mohan

Malviya National Mission on Teachers and Teaching, Ministry of Human Resource Development (MHRD) held from 10-18 October 2020 conducted by Teaching Learning Centre, Ramanujan College, University of Delhi (DU), New Delhi in association with Department of Computer Science, RLA College, University of Delhi, Delhi.

- One-week Faculty Development Program on "Network Science: Foundation of Social Network Analysis" under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Ministry of Human Resource Development (MHRD) held from 3-8 December 2018 conducted by Teaching Learning Centre, Ramanujan College, University of Delhi (DU), New Delhi and held at Department of Computer Science, University of Delhi (DU), Delhi.
- One day Faculty Development Program on "Teachers as mentors" conducted by Internal Quality Assurance Cell on 25th October, 2018 held in college premises.
- Two-day workshop on 'Introduction to Robotics' conducted by Indian Institute of Technology, Mumbai at Cluster Innovation Center, University of Delhi, on 24-25 Sept, 2014.
- Three-day hands-on workshop on 'Technology Enabled Teaching-Learning' held from 21-23 Nov, 2013 in college premises and prepared educational content.
- Two-day Academic Congress titled 'Enabling the young: Redefining Education' by University of Delhi on 6-7 Sept, 2012.
- Refresher Course in Computer Science & Information Technology (30th Aug to 24th Sept 2010) from ASC, Jawaharlal Nehru University.
- Two-day workshop (14-15 May, 2010) workshop on Recent Advances in Research Methods and Data Analytical Tools, at All India Management Association, Delhi.
- Freed.in, one-day (2009) conference at Jawaharlal Nehru University, Delhi.
- Refresher Course in Computer Science (10th Nov to 5th Dec 2008) from ASC, Jawaharlal Nehru University.

Research Projects (Major Grants/Research Collaboration)

1. Name: Digital India – Challenges & Opportunities
Position: Project Investigator
Duration: 2015-16
Research Agency: University of Delhi
Grant: Rs. 3.5 Lakh
2. Name: Artificial Olfaction using e-nose – mimicking human nose for gas sensing applications
Position: Co-Project Investigator
Duration: 2013-14
Research Agency: University of Delhi
Grant: Rs. 5 Lakh
3. Name: CO2 Gas Sensing - an ICT based investigation for pollution control
Position: Co-Project Investigator
Duration: 2012-13
Research Agency: University of Delhi
Grant: Rs. 10 Lakh

Awards and Distinctions

Teaching Excellence Award for Innovation (2014-15)
For DU Innovation Project "Artificial Olfaction using e-nose – mimicking human nose for gas sensing applications".

Association With Professional Bodies

Life time membership of Computer Society of India

Other Activities

Guided students under following projects in Elite scheme of college:
1. Disaster Management to combat Covid-19. (2021-22)
2. Data Analysis and Visualization of Rainfall and floods in India (2021-22)
3. E-student-Website for student resources (2016)
4. ELITE Student Assistant (ESA) – An Android Application to provide students with resources like notes, e-books,

Guidelines and Question Papers (2016)
5. Departmental Student Information System (2015)
6. Information System for Alumni Database (2012)
7. Student portal development (2012)