

DEPARTMENT OF COMPUTER SCIENCE DYAL SINGH COLLEGE, UNIVERSITY OF DELHI FACULTY DETAIL



| Title | Ms. | First Name | SAPNA | Last Name | GROVER | Photograph |
|----------------------------|-----|---|---|-----------|--------|---|
| Designation | | Assistant Professor | | | | 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / |
| Address | | Room No: 1005, Department of Computer Science, Dyal Singh College, Lodhi Road, Pragati Vihar, New Delhi, Delhi 110003 | | | | |
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| Residence | | | | | | 4 |
| Mobile | | | | | | |
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| Web-Page | | | | | | |
| Educational Qualifications | | | | | | |
| Degree | | I | Institution | | Year | |
| Ph.D Computer Science | | | Department of Computer Science, University of Delhi | | | Pursuing |
| M.Sc Computer Science | | | Department of Computer Science, University of Delhi | | | 2009-2011 |
| B.Sc(H) Computer | | | Deen Dayal Upadhyaya College, Universi- | | | 2006-2009 |

Career Profile

Science

1. Teaching in Dval Singh College, University of Delhi since July 2017.

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- 2. Taught in Shivaji College, University of Delhi from July 2013 to July 2017.
- 3. Taught in Deen Dayal Upadhyaya College, University of Delhi from January 2013 to May 2013.

Administrative Assignments

- 1. Member, Web Development Committee, Dyal Singh College, 2024-25.
- 2. Member, Finance Committee, Dyal Singh College, 2024-25.
- 3. Member, Women Advisory Committee, Dyal Singh College, 2023-24.
- 4. Member, Organizing team, Science Fair, Dyal Singh College, 28-29 February 2024.
- 5. Convener, Technical Events Committee, COMEST Computer Science Society, January 2023 onwards.
- 6. Member, Co-curricular Events Committee, COMEST Computer Science Society, May 2024 onwards.
- 7. Member, IQAC Mentor-Mentee Committee, Computer Science, since January

2022.

- 8. Member, Time Table Committee, Computer Science, for 2019 2020, 2020-2021, 2022 2023 and May 2024 onwards.
- 9. Member, Academic Committee, Computer Science, for 2023 2024.
- 10. Member, Admission Committee, Computer Science, for academic year 2018, 2021 and 2023.
- 11. Member of Seminar-Excursion team of the Department of Computer Science for the academic year 2017- 2018 and July December 2022.
- 12. Member of the Technical Fest organization team for the academic year 2018.
- 13. Member of the IQAC Organize Remedial Session Committee, 2021-2022, 2022-2023, 2023-2024.

Areas of Interest / Specialization

Theoretical Computer Science, Data Structures, Approximation Algorithms

Subjects Taught

Design and Analysis of Algorithms, Data Structures, Programming in C++, Programming in Java, Computer System Architecture, Discrete Structures, Computer Graphics

Research Guidance

Publications Profile

- 1. "Sapna Grover, Arun Raman, Hema Banati: Does Bilingual Specification impact students' comprehension of problems in Introductory Programming?" In COMPUTE 2023.
- 2. "Neelima Gupta, Sapna Grover and Rajni Dabas: Respecting Lower Bounds in Uniform Lower and Upper Bounded Facility Location Problem" in COCOON 2021.
- 3. "Sapna Grover, Neelima Gupta, Samir Khuller and Aditya Pancholi: Constant factor Approximation Algorithm for Uniform Hard Capacitated Knapsack Median Problem" in FSTTCS 2018.
- 4. "Sapna Grover, Neelima Gupta and Aditya Pancholi: Improved Local Search Based Approximation Algorithm for Hard Uniform Capacitated k-Median Problem" in Informatica -An international journal of Computing and Informatics, ISSN: 0350-5596, Vol. 42, Issue 3, September 2018 (Pg: 401-405).
- 5. "Sapna Grover, Neelima Gupta and Samir Khuller: LP-based approximation for uniform capacitated facility location problem" in Elsevier journal of Discrete Optimization (IF = 1.1), ISSN: 1572-5286, Vol. 45, July 2022.
- 6. "Aditya Pancholi, Sapna Grover: Scaled Agile Framework: A Blight" in International Journal of Innovative Research & Development, ISSN 2278-0211, Vol. 3 Issue 5, May 2014, (Pg no. 425-427)
- 7. "Aditya Pancholi, Sapna Grover: Fast Greedy Algorithm for Routing in DelayTolerant Network" in International Journal of Engineering and Computer Science,

- ISSN No.: 2319-7242, Vol. 3 Issue 5 May, 2014 (Pg no. 6027-6032).
- 8. "Aditya Pancholi, Sapna Grover, IRCAR: Improved Reputation based Context-aware Routing Algorithm for Delay Tolerant Network" in International Journal of Engineering and Computer Science, ISSN No.: 2319-7242, Vol. 3 Issue 4, April 2014 (Pg no. 5449-5552).
- 9. "Sapna Grover, Aditya Pancholi: From Marvels to Disasters: Flaws in Requirements Engineering and Design" in International Journal of Innovative Research & Development, ISSN 2278-0211, Vol. 3 Issue 5, May 2014, (Pg no. 469-472).
- 10. "Sapna Grover, Aditya Pancholi, Sonika Arora, FSR: Ferry-based Secure Routing Algorithm for Delay Tolerant Networks" in International Journal of Engineering and Computer Science, ISSN No.: 2319-7242, Vol. 3 Issue 5, May 2014 (Pg no. 6104-6108).
- 11. "Sapna Grover, Aditya Pancholi: Routing in Delay Tolerant Mobile Network: A Comparative Analysis" in International Journal of Engineering and Computer Science, ISSN No.: 2319-7242, Vol. 3 Issue 4, April 2014 (Pg no. 5568-5571).
- 12. Co-author in a chapter "Prashanti- Defining Peace" in a book "Udayan: New beginning", Women's Development Cell, Shivaji College, University of Delhi (2017). ISBN: 978-81-86845-22-4.
- 13. "Utkarsha Epitomizing Progress": Women's Development Cell, Shivaji College, University of Delhi (2016), Prithavi Prakashan, New Delhi. ISBN: 81-86845-41-0, as Technical Editor.
- 14. Chapter in book: "Anujivami- I survive": Women's Development Cell, Shivaji College, University of Delhi (2014), Pinnacle Learning, New Delhi. ISBN: 978-93-83848-02-7, page no: 46-55.

Conference Organization/ Presentations

- 1. Presented a paper titled "Neelima Gupta, Sapna Grover and Rajni Dabas: Respecting Lower Bounds in Uniform Lower and Upper Bounded Facility Location Problem" in COCOON 2021.
- 2. Presented a paper titled "Sapna Grover, Neelima Gupta, Samir Khuller and Aditya Pancholi: Constant factor Approximation Algorithm for Uniform Hard Capacitated Knapsack Median Problem" in FSTTCS 2018.
- 3. Organized Intl' Conference COMPUTE 2021, held at Department of Computer Science, University of Delhi (Online Mode) during 18-20 November 2021.

| Research Projects (Major Grants/Research Collaboration) | | | | | |
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| Awards and Distinctions | | | | | |
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| Association With Professional Bodies | | | | | |

ACM member since 2020

Other Activities like MOOCs/ Patents etc.

- 1. Resource person in "Learning LaTeX: A tool for technical writing and presentation" organized by the Department of Computer Science and Department of Statistics in collaboration with IQAC, under the aegis of Viksit Bharat Secretariat, Mata Sundri College for Women on 26 February, 2024.
- 2. Resource person in a 5-day Skill Enhancement Workshop organized by IQAC, Dyal Singh College, held from August 21-25, 2023.
- 3. Participated in the formulation of syllabus of the papers: Design and Analysis of Algorithms, Data Structures, Information Security, Discrete Structures for B.Sc (H) Computer Science, B.Sc (Prog.) Computer Science, B.A (Prog.) Computer Science and Generic Electives under NEP 2020.
- 4. Resource person in a one-week workshop titled "Computer Literacy and environmental Awareness" for topic "Latex for Beginners" held at Sri Lal Bahadur Shastri National Sanskrit University, 28th November to 02nd December 2022.
- 5. Resource person in a one-day workshop titled "Exploring Python as a tool for Data Science" at Dyal Singh College held on August 30, 2019.
- 6. Resource Person during INSPIRE Science Camp for two consecutive years: 2015 and 2016, held at Shivaji College, University of Delhi.
- 7. Participated in the meeting for formulation of guidelines of the Generic Elective paper "Information Security and Cyber Laws" for B.Sc(H) Courses other than Computer Science.
- 8. Participated in the meeting for formulation of guidelines of the paper "Analysis of Algorithms and Data Structures" for B.Sc (Prog.) Computer Science.

Workshops/FDPs/Conferences attended

- 1. Completed a 4-Week Faculty Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" from 22 July 20 August, 2023.
- 2. Intl' Conference FSTTCS 2018, 10-14 December 2018 at Ahmadabad University, Guiarat.
- 3. Inter-Research-Institute Student Seminar (IRISS) in Computer Science, February 06-07, 2019 at Kochi.
- 4. ACM Winter School on 'Algorithms for Big Data and ML': 28 December 2020 9 January 2021.
- 5. Intl' Conference Highlights of Algorithms 2021: 31 May 3 June 2021.
- 6. Intl' Conference COCOON 2021, 24 25 October 2021.
- 7. Intl' Conference COMPUTE 2021 (Online Mode) 18 20 November 2021, Department of Computer Science, University of Delhi.
- 8. ACM Winter School on 'Algorithms and Lower Bounds: To Improve, or Not to Improve, That's the Question!': 03 12 January 2022.
- 9. FDP on "Effective Teaching of Data Structures" organized by ACM India in association with IIIT Delhi from January to April 2022 (online mode).
- 10. FDP on "Introduction to Programming in Python" organized by ACM India in as-

- sociation with IIIT Delhi from August to November 2022 (online mode).
- 11. Faculty Training Programme on Research Project Management held at CIC Centre for Science Education and Communication, University of Delhi, in July 2016.
- 12. International Research Workshop on Cloud Computing held at JNU in December 2016.

Signature of Faculty Member