


FACULTY PROFILE

| Title<br>(Ms/Mr/Dr/Prof)   | Ms  | First Name  | Reshu | Last Name  | Chaudhary          | Photograph  |
|--|---|---|-------|--|--------------------|---|
| Designation  | Assistant Professor   |   |       |  |                    |  |
| Department   | Computer Science  |   |       |  |                    |   |
| Address (Official)   | Kalindi College, University of Delhi, East Patel Nagar, New Delhi-110005. India   |   |       |  |                    |   |
| Phone No   | 9999186438  |   |       |  |                    |   |
| Email  | <a href="mailto:reshuchaudhary@kalindi.du.ac.in">reshuchaudhary@kalindi.du.ac.in</a>  |   |       |  |                    |   |
| <b>Education</b>   |   |   |       |  |                    |   |
| Subject  |   | Institution   |       | Year   | Details            |   |
| Ph.D. (Computer Science)<br><br><b>Thesis Title:</b> 'Enhancing Efficiency in Swarm Intelligence Algorithms Towards Novel Peacock Algorithm' |   | Department of Computer Science, University of Delhi |       | 2021   | Thesis submitted   |   |
| MCA  |   | Department of Computer Science, University of Delhi |       | 2010   | 83.47%             |   |
| B.Sc. (G) with Computer Science  |   | Hansraj College, University of Delhi                |       | 2007   | 76.44%             |   |
| <b>Career Profile</b>  |   |   |       |  |                    |   |
| Organization/Institution   |   | Designation   |       | Duration   | Role               |   |
| Kalindi College, University of Delhi   |   | Assistant Professor                                 |       | 18 Feb 2021 to Present   | Teaching           |   |
| Bharati College, University of Delhi   |   | Guest Faculty                                       |       | 11 Feb 2021 to 17 Feb 2021   | Teaching           |   |
| Agnity India Technologies Pvt Ltd  |   | Member Technical Staff                              |       | 5 <sup>th</sup> July 2010 to 30 <sup>th</sup> November 2011                                | Software Developer |   |
| <b>Research Interest/Specialization</b>  |   |   |       |  |                    |   |
| Evolutionary Algorithms, Optimization, Data Structures, Java   |   |   |       |  |                    |   |
| <b>Teaching Experience (Subject/Courses taught)</b>  |   |   |       |  |                    |   |
| <b>Courses Taught</b><br>B.Sc. (H) Computer Science, BA (P) Computer Application, BSc(H)/BA(H) Generic                                       |   |   |       |  |                    |   |
| <b>Subjects Taught</b><br>Artificial Intelligence, Software Engineering, Information Security and Cyber Laws, Programming with Python        |   |   |       |  |                    |   |
| <b>Publications (Peer Reviewed/Indexed Journals)</b>   |   |   |       |  |                    |   |
| Year of Publication  | Title   |   |       | Journal Name   | Co-author          |   |
| 2021   | <b>Chaudhary, R., &amp; Banati, H.</b> (2021). Improving convergence in swarm algorithms by controlling range of random movement. <i>Natural Computing</i> . doi: <a href="https://doi.org/10.1007/s11047-020-09826-y">10.1007/s11047-020-09826-y</a> |   |       | <i>Natural Computing</i><br>Impact factor: <b>1.495</b><br>Indexed: <b>SCIE</b> and Scopus | Hema Banati        |   |

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|------|--|---|--|
| 2020 | <b>Chaudhary, R.,</b> & Banati, H. (2020). Study of population partitioning techniques on efficiency of swarm algorithms. <i>Swarm and Evolutionary Computation</i> , 55, 100672. <a href="https://doi.org/10.1016/j.swevo.2020.100672">doi:10.1016/j.swevo.2020.100672</a>  | <i>Swarm and Evolutionary Computation</i><br>Impact Factor: <b>6.912</b><br>Indexed: <b>SCIE</b> and Scopus | Hema Banati  |
| 2020 | <b>Chaudhary, R.,</b> & Banati, H. (2020). Hybrid Enhanced Shuffled Bat Algorithm (HESB) for Data Clustering. <i>International Journal of Advanced Intelligence Paradigms (IJAIP)</i> , 17(3/4), 323 – 341. <a href="https://doi.org/10.1504/IJAIP.2020.10029347">doi:10.1504/IJAIP.2020.10029347</a>                              | <i>International Journal of Advanced Intelligence Paradigms (IJAIP)</i><br>Indexed: Scopus                  | Hema Banati  |
| 2019 | <b>Chaudhary, R.,</b> & Banati, H. (2019). Swarm bat algorithm with improved search (SBAIS). <i>Soft Computing</i> , 23, 11461 – 11491. <a href="https://doi.org/10.1007/s00500-018-03688-4">doi:10.1007/s00500-018-03688-4</a>  | <i>Soft Computing</i><br>Impact factor: <b>3.050</b><br>Indexed: <b>SCIE</b> and Scopus                     | Hema Banati  |
| 2019 | <b>Chaudhary, R.,</b> & Banati, H. (2019). Weighted Multi-Modal Bat Algorithm with Improved Search (wMMBAIS). <i>International Journal of Hybrid Intelligence</i> , 1(4), 326 – 361. <a href="https://doi.org/10.1504/IJHI.2019.106788">doi:10.1504/IJHI.2019.106788</a>   | <i>International Journal of Hybrid Intelligence</i>   | Hema Banati  |
| 2017 | Banati, H., & <b>Chaudhary, R.</b> (2017). Multi-Modal Bat Algorithm with Improved Search (MMBAIS). <i>Journal of Computational Science</i> , 23, 130 – 144. <a href="https://doi.org/10.1016/j.jocs.2016.12.003">doi:10.1016/j.jocs.2016.12.003</a>   | <i>Journal of Computational Science</i><br>Impact Factor: <b>2.644</b><br>Indexed: <b>SCIE</b> and Scopus   | Hema Banati  |
| 2010 | Pal, S.K., Kapoor, S., Arora, A., <b>Chaudhary, R.,</b> & Khurana, J. (2010). Design of strong cryptographic schemes based on Latin Squares. <i>Journal of Discrete Mathematical Sciences and Cryptography</i> , 13(3), 233 – 256. <a href="https://doi.org/10.1080/09720529.2010.10698290">doi:10.1080/09720529.2010.10698290</a> | <i>Journal of Discrete Mathematical Sciences and Cryptography</i><br>Indexed: Scopus                        | Sabil K Pal,<br>Shivam Kapoor,<br>Alka Arora,<br>Jatin Khurana |

### Seminar/Workshop/Conference Presentations

1. **Chaudhary, R.,** & Banati, H. (2019). Peacock Algorithm. *IEEE Congress on Evolutionary Computation (CEC)* (pp. 2331 – 2338). Wellington, New Zealand: IEEE. [doi:10.1109/CEC.2019.8790371](https://doi.org/10.1109/CEC.2019.8790371) (**Scopus Indexed**)
2. **Chaudhary, R.,** & Banati, H. (2019). Capitalizing Diversity for Efficiency Enhancement in Multi-Population Swarm Algorithms. *10th International Conference on Computing, Communication and Networking Technologies (ICCCNT)* (pp. 1 – 7). Kanpur, India: IEEE. [doi:10.1109/ICCCNT45670.2019.8944872](https://doi.org/10.1109/ICCCNT45670.2019.8944872) (**Scopus Indexed**)
3. **Chaudhary, R.,** & Banati, H. (2018). Modified Shuffled Multi-Population Bat Algorithm. *International Conference on Advances in Computing, Communications and Informatics* (pp 943 – 951). Bangalore, India: IEEE. [doi:10.1109/ICACCI.2018.8554926](https://doi.org/10.1109/ICACCI.2018.8554926) (**Scopus Indexed**)
4. **Chaudhary, R.,** & Banati, H. (2018). Adaptive Multi-Swarm Bat Algorithm (AMBA). In Das, K., Bansal, J., Deep, K., Nagar, A., Pathipooranam, P., & Naidu, R. (Ed.) *Soft Computing for Problem Solving. Advances in Intelligent Systems and Computing*, 1048, pp. 805-821. Springer. [doi:10.1007/978-981-15-0035-0\\_66](https://doi.org/10.1007/978-981-15-0035-0_66) (**Scopus Indexed**)
5. **Chaudhary, R.,** & Banati, H. (2017). Shuffled multi-population bat algorithm (SMPbat). *International Conference on Advances in Computing, Communications and Informatics (ICACCI)* (pp. 541 – 547). Udupi, India: IEEE. [doi:10.1109/ICACCI.2017.8125873](https://doi.org/10.1109/ICACCI.2017.8125873) (**Scopus Indexed**)
6. Banati, H., & **Chaudhary, R.** (2016). Enhanced Shuffled Bat Algorithm (EShBAT). *International Conference on Advances in Computing, Communications and Informatics (ICACCI)* (pp. 736 – 743). Jaipur, India: IEEE. [doi:10.1109/ICACCI.2016.7732134](https://doi.org/10.1109/ICACCI.2016.7732134) (**Scopus Indexed**)

### Awards and Distinctions

Cleared UGC–NET–JRF (December 2013)  
Got All India Rank 5 in NIMCET 2007  
Got All India Rank 5 in DU MCA Entrance 2007  
Got All India Rank 42 in PU MCA Entrance 2007

