Dr. Himani Mittal Assistant Professor

Department of Computer Science and Applications GGDSD COLLEGE Chandigarh

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Youtube Channel: https://www.youtube.com/c/DrHimaniMittal

Linkedin: linkedin.com/in/himani-mittal

DOB: 25th Jan, 1983



Educational Qualifications Ph.D.in Computer Science

Department of Computer Science and Applications, Panjab University

Chandigarh, India (2017)

MCA, Department of Computer Science and Applications, Panjab

University Chandigarh, India

BCA, GGDSD College-32, Chandigarh

Teaching/Research Experience 02.01.2012 to till date

Assistant Professor in Department of Computer Science and Applications,

GGDSD College, Chandigarh

Subjects Taught: Theory of Computation, Data Structures, Algorithm Design and Analysis, Artificial Intelligence, Unix/Linux at graduate and

postgraduate level

Areas of Interest

Natural Language Processing, Machine Learning, Education Technology, Ontology, Assistive Technology

Publications (Journal/Book Chapters)

Journals

- Mittal, H., (2024), Software security: Threats, solutions and challenges, Computer Software and Media Applications, Volume 6 Issue 1, Enpress Publisher, ISSN: 2578-1669 (Online) doi: 10.24294/csma.v6i1.3769
- 2. Mittal, H., Mohan, P., (2021), E-waste Awareness among Educated residents of Chandigarh: A Pilot Study", New Horizons- A Research Journal, ISSN No. 2277 5218. Double Blind Peer Reviewed, MCM DAV College, Chandigarh.
- 3. Mohan, P., Mittal, H. (2020) Review of ICT usage in disaster management, *International Journal of Information Technology*. 12, 955-963 https://doi.org/10.1007/s41870-020-00468-y (UGC Care List, Scopus)
- Mittal, H., (2018), Multiagent based Solution for Smart Cities: Essentials and Challenges, New Horizons- A Research Journal, ISSN No. 2277 – 5218. Double Blind Peer Reviewed, MCM DAV College, Chandigarh.
- Mittal, H., & Devi, M. S. (2018). Subjective Evaluation: A Comparison of Several Statistical Techniques. Applied Artificial Intelligence, 1-11. (2016 Impact Factor: 0.6 SCIE Indexed 2022 2.77 impact) Print ISSN: 0883-9514 Online ISSN: 1087-6545 (cited by 2)
- 6. Mittal, H. (2017). Multiagent System for Management and Evaluation of Examinations, *International Journal of Advanced Research in Computer Science*, 8(9). (UGC indexed, peer-reviewed) ISSN: 0976-5697
- 7. M. Syamala Devi and Himani Mittal, (2016) "Machine Learning Techniques with Ontology for Subjective Answer Evaluation", International Journal on Natural Language Computing, ISSN: 2278-1307 [online]; 2319-4111 [print], Vol 5(2) Published by AIRCCE. (Cited by 23, peer-reviewed)

- 8. Himani Mittal and M. Syamala Devi, (2013) "Subjective Evaluation using LSA Technique", International Journal of Computers and Distributed Systems, Peer-reviewed Online Journal. ISSN: 2278-5183, Vol 3, Issue-1. (Cited by 4, peer-reviewed)
- 9. M. Syamala Devi and Himani Mittal, (2012) "Review of Computerized Evaluation Tools in Education", International Journal of Artificial Intelligence and Computational Research- 4(2), 2012, pp. 111-117. International Science Press. ISSN: 0975-3974. (Cited by 3, peer-reviewed)

Book:

1. Algorithms — Design and Analysis Simplified, Mohindra Publishing house, 29 July 2024, ISBN: 978-81-972976-7-0.

Book Chapters:

- Mittal, H., (2024), Software-Defined Network: Security Solutions, Applications and Future, Software Defined Network Frameworks: Security Issues and Use Cases, CRC, Taylor and Francis Group, U.K Software-Defined Network | 7 | Security Solutions, Applications, and F (taylorfrancis.com)
- Mittal, H., (2023), VR in social learning: applications and challenges, Augmented and Virtual Reality in Social Learning, pg 1-10, De-gruter Germany, 10.1515/9783110981445-001 https://www.degruyter.com/document/doi/10.1515/9783110981445/html
- 3. Mittal, H., (2023), Virtual Reality Applications in Healthcare: A newage Technology Perspective, Immersive Virtual and Augmented Reality in Healthcare An IoT and Blockchain Perspective, CRC Press, Taylor & Francis Group, U.K, 11 Oct, 2023. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003340133-3/virtual-reality-applications-healthcare-himani-mittal
- 4. Mittal, H., (2021), Smart Farming Enabling Technologies: A Systematic Review, Internet of Things and Machine learning in Agriculture, Nova Publications, USA. https://doi.org/10.52305/MTXX5116 ISBN: 978-1-68507-192-9
- Mittal, H., (2021), "<u>Blockchain technology: architecture, consensus protocol and applications</u>", Blockchain 3.0 for Sustainable Development, vol 10 of series: <u>De Gruyter Frontiers in Computational Intelligence</u>, pp- 1-7, De-Gruyter, US (Scopus indexed)ISBN: 9783110702453 (cited by 2)
- 6. Mittal, H., (2020), Robotics: An Overview, CSI Communication, Vol-44(7), Oct 2020, ISSN 0970-647X.
- 7. Mittal, H., (2020), Digital Twin, CSI Communication, Vol-44(6),pp-, Sep 2020, ISSN 0970-647X. (cited by 3)
- 8. Mittal, H., (2020), Virtual Reality, CSI Communication, Vol-44(4), pp-9, July 2020, ISSN 0970-647X, (cited by 3)
- 9. Himani Mittal, (2019) "Cloud Computing: An Overview", CSI Communications, ISSN 0970-647X, Oct 2019, Vol 43(7), pp-8.
- Mittal, H. (2018). Ontology Design and Use for Subjective Evaluation of Computer Science Examinations. In *Knowledge Computing and its Applications* (pp. 287-309). Springer, Singapore. (Scopus indexed)ISBN: 978-981-10-8257-3
- 11. Himani Mittal and M. Syamala Devi, (2016) "WordNet Tool in Natural Language Processing", CSI Communications, ISSN 0970-647X, April 2016, Vol 40(4), pp-7-8.
- 12. Himani Mittal and M.Syamala Devi, (2016) "Computerized Subjective evaluation using Hybrid Technique", Advances in

Intelligent Systems and Computing, subtitle: Proceedings of International Conference on Innovations in Computer Science and Engineering, Book Series Vol. 413, pp 295-303. Springer-Verlag, (Scopus indexed, UGC indexed, Cited by 10) ISBN: 978-981-10-0417-9.

13. <u>Himani Mittal, Syamala Devi Mandalika</u>, (2014) Framework for Evaluation of Programming Language Examinations, Computational Intelligence Techniques for Comparative Genomics, SpringerBriefs in Applied Sciences and Technology 2015, pp 121-128, Print ISBN: 978-981-287-337-8, Online ISBN: 978-981-287-338-5 (Scopus indexed, UGC indexed, Cited by 3)

Seminars/ Conferences/Symposiums

- 1. Himani Mittal (2022), "Framework for Computer Aided Testing of Programming Skills in C", presented at National Seminar on Recent Trends in IT at GGDSD College, Sector 32, Chandigarh.
- 2. Pooja Mohan and Himani Mittal, (2019), "Use of ICT in Disaster Management", presented at International Conference on Recent Trends in Computer Applications and Information Technology, CSI Sponsored, 19-20 April, 2019, Ambala.
- 3. Himani Mittal and Pooja Mohan, (2019), "E-waste Management state-of-the-art and Assessment of Awareness", presented at International Conference on Recent Trends in Computer Applications and Information Technology, CSI Sponsored, 19-20 April, 2019, Ambala.
- 4. Himani Mittal and M.Syamala Devi, (2016) "Test Paper generation using Selection Algorithm", Presented at International Conference on Communication Systems and Network Technologies, Chandigarh.
- 5. Himani Mittal and M. Syamala Devi, (2013) "Subjective Evaluation using LSA Technique", 7th Chandigarh Science Congress, CHASCON-2013, Panjab University, Abstract printed on pp. 141.

Refresher Courses/Workshops/ Training Programmes

- 1. Attended Refresher in Education, TLC Ramanujan College, Delhi (online) from 31 Jan- 14 Feb 2024
- 2. MMTTC (previously HRDC), Panjab University, UGC NEP, 16 Jan -26 Jan 2024
- 3. Attended FDP in PSYCHOLOGICAL SKILLS, TLC Ramanujan College, Delhi (online) from 24 Dec- 31 Dec 2023
- 4. Attended Refresher in Physical Sciences from 15-28 th Feb 2022 at HRDC, PU
- 5. Attended Refresher in Research Methodology (All Sciences) from 13- 26^{th} Feb 2021 at HRDC, PU
- 6. Attended UGC Sponsored Refresher Program, HRDC Panjab University from 28 Dec-17 Jan, 2019
- **7.** Attended UGC Sponsored Orientation Program, HRDC, Panjab University from 1 May-28 May 2018.
- 8. International Conference of Education, Engineering Education and Instructional Technology Conference, Qatar University, 22-23 Feb 2021 (online)
- National Seminar on Goods and Services Tax (GST) held on 20th Jan, 2018 sponsored by College Development Council of Panjab University.
- 10. National Seminar on Emerging Trends in Information Technology: Challenges and Strategies organized by PG Dept of Information Technology, GGDSD College, Chandigarh, on 31 January, 2014.
- 11. National Seminar on Business Growth and corporate sustainability organized by Department of Commerce, GGDSD College, Chandigarh, on 17 January, 2014.

- 12. National Seminar on Educational Reforms: Challenges and Strategies organized by GGDSD College, Sector-32, Chandigarh, on 9th Feb, 2013
- **13.** National Seminar on Economic Reforms: an unfinished Agenda organized by GGDSD College, Sector-32, Chandigarh, on 11th Feb, 2012.
- 14. Attended 1 day National Workshop on "Natural Language Processing" on 27 Feb 2024, DCSA, Panjab University, Chandigarh.
- 15. Attended lecture-cum-workshop on "Indian Research Information Network System (IRNIS)", GGDSD College, Chandigarh, under RUSA on 1st Dec, 2018.
- 16. Attended a workshop on Academic Publishing: Way to increase the visibility of your Research, GGDSD College, Sector 32, Chandigarh, on 31st Mar, 2017.
- 17. Attended a hands-on Workshop on Cloud Computing at GGDSD College, Sector 32, Chandigarh on 5th Nov, 2016.
- 18. Attended a Workshop on session "Use of e-Resource Contents/Learning Exchange System-Teaching Methodology" in Automation System in Education Sector Sponsored by RUSA organized by S.D. College, Sec 32, Chandigarh from 18th Feb to 20th Feb 2016.
- **19.** Attended a Workshop on session "Campus Management system /Monitoring of Students Progression –ERP" in Automation System in Education Sector Sponsored by RUSA organized by S.D. College, Sec 32, Chandigarh from 18th Feb to 20th Feb 2016.
- 20. Participated in online FDP on "AI and Machine Learning" organized by NIELIT from 8th Aug-12 Aug 2022.
- 21. Participated in online FDP on "Stress Management" organized by ICT Academy from 8th Dec- 12th Dec 2020.
- 22. Participated in Online FDP on Emerging Technologies for Education and Research in CS and IT from 13th-25th July 2020, 48 hours course at BVICAM, Delhi.
- 23. Participated in Online capacity building Workshop on Outcome Based Education and NBA Accreditation Process from 27th-31st July 2020, 20 hours course at BVICAM, Delhi
- 24. Participated in Faculty Development Program conducted by GGDSD College, Chandigarh on Biological Analysis and Data Science for seven days from 27th Feb 4th Mar 2020 sponsored by UGC under RUSA.
- 25. Participated in Faculty Development Program conducted by IIT Roorkee at PML SD Business School, Chandigarh on Blockchain for five days from 20th -24th Jan 2020.
- 26. Participated in Faculty Development Program conducted by Instructional Skill Workshop in collaboration with GGDSD College for seven days in Oct, 2015.
- 27. Participated in Faculty Development Program jointly organized by University of Fraser Valley and GGDSD College at GGDSD College campus, Chandigarh, India on November 22, 2014.
- **28.** Participated in Faculty Development Program jointly organized by University of Fraser Valley and GGDSD College at GGDSD College campus, Chandigarh, India from April 29, 2013-May 3, 2013.

Expert Lecture

- 1. Conducted a Lecture followed by practical at Kendriya Vidyalaya, 3rd BRD Air Force Station, Chandigarh in Teacher Training Program, on Web Designing on 24th Dec, 2013.
- **2.** Conducted a Lab Session on 3-12-2012 during one week UGC Sponsored National Workshop on Digital Image Processing using

MATLAB organized by Department of Computer Science, Punjabi University, and Patiala from November 29-December 5, 2012.

Reviewer

- Ballari Institute of Technology and Management, Ballari, Karnataka is organizing the Third IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE-2024) during 26th & 27th April 2024 in association IEEE Bangalore Section- 1 manuscript reviewed.
- 2) AIAP Conference -1 manuscript reviewed, Program Committee member and reviewer. https://ccseit2024.org/aiap/committee
- 3) SJB Institute of Technology, Bengaluru is organizing IEEE International Conference on Distributed Computing and Optimization Techniques (ICDCOT-2024) during 15-16 March 2024 in association IEEE Bangalore Section 2 manuscripts reviewed.
- 4) H.K.E. Society's S.L.N. College of Engineering, Raichur, Karnataka is organizing Second IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS -2024) during 23rd & 24th February 2024 in association with IEEE Bangalore Section and IEEE North Karnataka Subsection- 4 manuscripts reviewed
- 5) Journal of Big Data, Springer -2 manuscript reviewed, 2023, 2024.
- 6) Journal Peer-to-Peer Networking and Applications, Springer Nature 1 manuscript reviewed, 2023.
- 7) IEEE ICMNWC-2023 @ SSIT, Tumkur, 3 paper reviewed.
- 8) IEEE EASCT 2023, RV Institute of Technology and Management (RVITM), Bangalore, 3 paper reviewed.
- 9) Journal of Super Computing- 2023, 2 papers reviewed, 1 in 2024
- 10) IEEE ICIICS, sharnbasva University, Kalaburagi, 24-25 Nov 2023, 6 papers reviewed.
- 11) IEEE ICDSNS 2023 Reviewer, 6 papers reviewed.
- 12) Reviewed 2 papers in Soengg Conference 2022 (July 2022)
- 13) Reviewed one research paper in Soengg 2020 (14 Feb 2020)
- 14) Applied Artificial Intelligence, Taylor and Francis, Sep 2020-2022, 1 manuscript and 2 abstracts, 2023-1 manuscript.
- 15) 2 research papers at AIRCC Conference in Zurich, Switzerland Sep 2020

HIMANI MITTAL