DR SHAILJA AGNIHOTRI
Assistant Professor
Department of Computer Science and Applications
GGDSD COLLEGE Chandigarh
India -160030
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DOB: 30th August 1982

Educational Qualifications:

National Testing Agency, New Delhi, New Delhi
Qualified UGC- NET Exam, 98.8 Percentile, Computer Science and Applications, Dec. 2019

Chitkara University, Punjab
Completed Ph.D., Computer Science and Engineering, July 2019

Kurukshetra University, Haryana
Completed MCA, 84%, Computer Applications, Jun. 2010

GGDSD College, Panjab University, Chandigarh
Completed MSc (IT), 88.4%, Information Technology, May. 2005

PGGC-46, Panjab University, Chandigarh
Completed BCA, 75%, Computer Applications, May. 2003

Teaching/Research Experience

November 2011 - till date

Assistant Professor in Department of Computer Science and Applications, GGDSD College, Chandigarh

July 2005 – November 2011

Ad hoc Lecturer in in Department of Computer Science and Applications, GGDSD College, Chandigarh

Apr. 2005 – Jun. 2005
Junior Programmer, Hartron. Chandigarh

Areas of Interest

- Internet of Things, Routing Issues, WSN, Java, Data Structures, PHP

Publications
(Journal/Book Chapters)

Journal Publications:

- Paper published titled “Integration of Nanotechnology and IoT” in Gyan Vimarsha : an inter-disciplinary research journal (A Multi Disciplinary Peer-Review Annual Research Journal) Vol 6, pp. 13-18, May 2023.

- Paper published titled “Wireless Sensor Networks and Internet of Things Challenges” in Gyan Vimarsha : an inter-disciplinary research journal (A Multi Disciplinary Peer-Review Annual Research Journal) Vol 5, pp. 125-133, May 2022.

- Paper published titled “IoT and Healthcare: A Review” in CEUR Workshop Proceedings (CEUR-WS.org) 2021.

- Paper Published "An Enhanced Routing Algorithm for Internet of Things that ResolvesHeterogeneity Issues," *2019 6th International Conference on Computing for Sustainable Global Development (INDIACom)*, New Delhi, India, 2019, pp. 542-547, 2019

- Paper Published "A survey and comparative analysis of the various routing protocols of Internet of Things", International Journal of Pervasive Computing and Communications, Vol. 13 No. 3, pp. 264-281. https://doi.org/10.1108/IJPCC-03-2017-0023, 2017

- Paper Published “A Review of Various Swarm Intelligence Based Routing Protocols for Iot” in JOTITT Volume 5 Number 1, Print 2321-3906 Online 2321-7146, 2017

- Paper Published “A Review: Data Mining Concepts and Privacy Preservation”, International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Vol. 4, Issue 8, ISSN (online)2320-9801 ISSN (print)2320-9798, 2017

- Paper Published “A Review of Image Mining Concepts, techniques and challenges”, International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Vol. 4, Issue 8, ISSN (online)2320-9801 ISSN (print)2320-9798, 2017

Book Chapters:

- Book Chapter published (2024) titled “Machine learning algorithms for data-driven systems in IoT”, In: Artificial Intelligence and Internet of Things based Augmented Trends for Data Driven Systems, published by Taylor and Francis, CRC Press, Vol 1, Pg 112-126.

- Book Chapter published (2020) titled “Content Based Routing Algorithm to Improve QoS in IoMT Networks”, In: Saha A., Kar N., Deb S. (eds) Advances in

Computational Intelligence, Security and Internet of Things. ICCISIoT 2019. Communications in Computer and Information Science, vol 1192. Springer, Singapore, 2020

- Book Chapter published (2020) titled "Examination Stress and Time Management Strategies" inbook "Positive Parenting", ISBN 978-81-941394-8-5, Atharv Publications, pp 217-230, 2020

Papers Presented:

- Paper presented titled "IoT and Healthcare: A Review" in International Conference on Emerging Technologies: AI, IoT, and CPS for Science & Technology Applications, September 06–07, 2021, NITTTR Chandigarh, India

- Paper presented titled "An Enhanced Routing Protocol to Resolve Heterogeneity Issues of IoT" in6th International Conference, IEEE, INDIACOM 2019 "Computing for Sustainable Global Development" held at BVICAM, New Delhi on March 14-15 2019.

- Paper Presented titled "Content Based Routing Algorithm to improve QoS in IoMT Networks" in 2nd International Conference, ICCISIoT, held at NIT, Agaratala on December 13-14, 2019

- Presented Paper on "Stress Among Working Women" on March 1, 2012 in National Seminar "Female, Family and Fitness" held at Government College, Sector 1, Panchkula

- Presented Paper on "Satellite ATM Networks" on Feb 11, 2012 in National Seminar " Economic Reforms: An Unfinished Agenda" held at GGDSD College Sec 32 Chandigarh

Conference/Seminars Attended:

- Attended International Conference ICCISIoT 2019 "Computational Intelligence, Security and IoT" held at NIT, Agartala on December 13-14, 2019

- Attended IEEE – 6th International Conference INDIACOM 2019 "Computing for Sustainable Global Development" held at BVICAM, New Delhi on March 14-15 2019.

- Attended National Seminar on "Lab-to-field: Need for Translational Research" organised by GGDSD College, Chandigarh and Indian National Congress Association Chandigarh Chapter on January 9, 2024

- Participated in the one day seminar on Quality Ecosystem held on 26/10/2021, Conducted online by Atmanirbhar Bharat Task Force and Bharatiya Shikshan Mandal, Punjab, Ministry of Education, Government of India

- Attended National Seminar on "The Demographic Dividend and India's Economic Future", held at GGDSD College, Chandigarh, on 18 Nov, 2015

- National Seminar attended 'Emerging Trends in Information Technology: Challenges & Strategies', on Jan 31, 2014 held at GGDSD College, Sec-32, Chandigarh

- National Seminar attended on "Education Reforms: - Challenges & Strategies", on Feb 9, 2013 held at GGDSD College, Chandigarh

- National Seminar attended on "Being Scientist: Legal and Ethical Aspects", on Jan 30, 2013 at GGDSD College, Chandigarh

Refresher/Workshops/FDPs Attended:

- Successfully completed the Online – NEP 2020 Orientation & Sensitization Programme from 20.05.2024 to 30.05.2024 under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Panjab University, Chandigarh

- Successfully completed online Python Course from University of Calicut from 10 June to 14 June 2024

- Successfully completed online Machine Learning Course from University of Calicut from 10 June to 14 June 2024

- Successfully completed Two weeks Online Interdisciplinary Refresher course in "Managing Online Classes and Co-creating MOOCS 26.0" from 08-22 May, 2023 organised by Ramanujan College, University of Delhi

- Attended and successfully completed an online 2 weeks Refresher course on "MOOCS 26.0" from 08 May 2023-22 May 2023) organized under the PMMMNMTT scheme by TLC Ramanujan College, University of Delhi

- Attended and successfully completed 7 days FDP on "Subject-Specific Benchmarking of Learning Outcomes: Outcome Based Education" from 26 October 2023-01 November 2023, organized by GGDSD College Chandigarh and Guru Angad Dev Malaviya Mission Teacher Training Centre SGTB Khalsa College, University of Delhi

- Attended and successfully completed 7 days FDP on "NEP 2020 and Ethical Paradigms in Pedagogy" from 21 June 2022- 27 June 2022, organized by HRDC, Panjab University Chandigarh

- Participated and Attended Ten days FDP on Data Science from 19 December 2022-30 December 2022 organized by GGDSD College Chandigarh

- Participated in Workshop on "Future of Innovation and Research: An impact of Information Technology on Academic Spheres" conducted on 05 August 2023 at GGDSD College, Chandigarh

- Participated in the AICTE sponsored QIP Short Term Course on Visual Cognition from 04/10/2021 to 09/10/2021 (One Week), Conducted online by Electronics and Communication Engineering Department, NITTTR, Chandigarh, Ministry of Education, Government of India

- Attended Online FDP -"Fundamentals of Artificial Intelligence" from 14th June to 18th June 2021by ICT Academy.

- Attended and successfully completed 124th Orientation Programme, Panjab University from 13th Nov – 3rd Dec 2019

- Attended Hands on workshop on Cloud Computing conducted by Aa2it, SASIT, Mohali in Oct 2016

- Attended workshop on Effective Literature Review for Ph.D. Work, and Identifying Publication Destinations for Ph.D. Work, Chitkara University, Punjab, on 3rd Sept, 2016

- Attended workshop on Creating Formatted technical documents using LaTeX, Chitkara University, Punjab, on 12-13 March, 2016

- Attended Workshop on "Automation System in Education Sector" Sponsored by RUSA organized by
  S.D. College, Sector 32, Chandigarh on 18-20 Feb, 2016

- Attended Instructional Skills Workshop (ISW) organized by Goswami Ganesh Dutta Sanatan Dharma College, Sector 32-C, Chandigarh and University of Fraser Valley from 14-20 Oct, 2015

- Attended Faculty Development Program, organized by University of Fraser Valley and GGDSD College, Chandigarh from 29 April-03 May, 2013

Administrative Experience/Achievements:

- Worked as Book Editor- "Sustainable Materials and Technologies" published by Saptrishi Publications in July 2024, ISBN – 9788197511622

- Published a Book, Title -: Swarm Intelligence Based Routing Protocol Stack for IoT", May 2024, Spatrishi Publications (UGC Approved), ISBN: 9788197227141

- Reviewed a Paper received from the reputed journal- Online Information Review on 7 Feb 2024

- Reviewed a Paper received from peer reviewed research journal of S&T Vigyan Prakash (UGC-CARE list approved) on 31st July 2023

- Received a letter of Appreciation from Panjab University, Chandigarh for vetting a syllabi of B.Voc Software Development in June 2023

- Successfully completed a course on "Predictive Analytics using IBM SPSS Modeler-

Advanced Course" and received the completion certificate on December 30, 2022

- Selected as the Primary Evaluator for the Toycathon-2021 and received the certificate from the Ministry of Education's Innovation Cell and AICTE for the exceptional Contribution
- Performed the duty of Deputy Centre Superintendent (Final Examinations) in Dec 2023, PanjabUniversity
- Coordinated Annual IT Fest Phoenix 2021 (Online) from 8th June to 11th June, 2021
- Reviewed paper publications for Scopus indexed Journal – IET Communications since 2019
- Question Paper setter (UG and PG classes) for Deen Dayal Upadhyaya University, Sikar
- Has been working as Evaluator in Panjab University, Chandigarh
- Performed the duty of Centre Superintendent (Final Examinations) in May 2019, Panjab Universityand Assistant Invigilator since 2005
- Member organising Committee: National Seminar on Emerging Trends in Information Technology:Challenges & Strategies " at GGDSD College, sector-32, Chandigarh on 31 Jan, 2014
- Member Organizing Committee in various events throughout from 2005 till date in the prestigiousGGDSD College

• Awarded **Roll of Honor** from Panjab University	Mar 2006
• **Gold Medallist** from Panjab University, MSc IT	July 2004
• **2nd** Position in Panjab University, MSc IT	July 2005
• **Scholarship** for all round excellent performance in MSc IT	Sept 2004
• **2nd** Position in College, BCA	July 2003
• Awarded **Cerificate of Merit** for two consecutive years from	2000-01
Chandigarh Librarians Association	2001-02
• Received **Certificate of Excellence** from	2001-02
Government College Sec 46	2002-03