DR GARIMA SRIVASTAVA Assistant Professor PG Department of Information Technology GGDSD College, Chandigarh India -160030

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Educational
Qualifications

Ph.D. in Computer Science

Department of Computer Science, APS University, Rewa, M.P. (State Govt. University), India (Awarded April, 2013).

Title of Ph.D. Thesis: "Exploring Novel Machine Learning Techniques for the Study of Biological Network"

Ph.D. Supervisor: Prof. Navita Shrivastava, Head, Dept. of Comp. Sc., A.P.S. University, Rewa (M.P.)

M.Sc.(Computer Science), University of Allahabad, U.P. (Central Govt. University), India, 2001.

B.Sc. (Physics, Mathematics, Computer Maintenance - Hardware), University of Allahabad, U.P. (Central Govt. University), India, 1999.

Teaching/ Research Experience

■ **July 2013 – till date**

Assistant Professor in PG Department of Information Technology, GGDSD College, Chandigarh (Affiliated to Panjab University, Chandigarh).

Teaching UG and PG classes of BCA, BA/BSc.(IT/Comp. Sc./Biotech./Bioinformatics), PGDCA, M.Sc.(IT/Bioinformatics). Major subjects taught- computer organization (hardware), computer oriented numerical methods, data structures, database management system, computer networks and programming languages.

■ April 2011 – 2013

Pursued Ph.D.(Comp. Sc.) as Regular **Research Scholar** from A.P.S. University, Rewa, M.P. (2007-2012, Awarded April, 2013). Resided in A.P.S. University, Rewa, till the award of degree. During Ph.D. work, also delivered lectures to M.Phil./M.Sc./PGDCA on research methodology and machine learning tools.

July 2006 – March 2011

Lecturer in DAV College, Sector 10, Chandigarh (Affiliated to Panjab University, Chandigarh).

Taught UG and PG classes of BCA, BA/BSc.(IT/Comp. Sc./Biotech./Bioinformatics), M.Sc.(Bioinformatics). Major subjects taught- computer organization and system maintenance, data structures, database management system, computer networks, operating system and programming languages.

Areas of Interest	Computer architecture, digital logic and hardware design, numerical method, machine learning applications and programming languages.
Publications (Journal/ Conference Proceedings /Abstract)	■ Garima Srivastava, "Predictive Learning Model to Infer Protein Interaction Network using Conjoint Sequence Residue", In Proc. National Seminar on 'Emerging Trends in Information Technology: Challenges and Strategies', GGDSD College, Sec-32, Chandigarh, ISBN No. 978-93-82068-25-9, pp. 81-84, 31 st January, 2014.
	Garima Srivastava et al., "Support Vector Machine to Infer Protein-Protein Interaction using Novel Encoding Strategies of Sequence Based Features", In Conf. Proc. (Abstracts), B.T.I.S. NET Bioinformatics National Symposium, "Role of Bioinformatics in Biodiversity Mangement", Sponsored by DBT, Govt. of India, New Delhi, conducted by CSIR - NBRI, Lucknow (U.P.), pp. 42-43, 2 nd February, 2013.
	Garima Srivastava et al., "Neural Network Model for Prediction of PPI using Domain Frequency & Association Score Base Classification of Protein Pairs", International Journal of Advanced Research in Computer Science (IJARCS), indexed in: Index Copernicus, DOAJ, Open J Gate, Electronic Journal Library, New Jour, Science central.com, Ulrichs Web, Dayang Journal Sys., ISSN No. 0976-5697, (May-June 12), Vol. 3, No. 3, pp. 234-238, 2012.
	■ Garima Srivastava et al., "Computational Model for Simulation of Biological Networks", Journal of Applied Management & Computer Science(JAMCS), CBS E-Journal- Biz n Bytes, ISSN No.0976-0458, ISBN 978-93-81212-02-8, Vol. 4, (Nov. 11), pp. 36-47, 2011.
	Garima Srivastava et al., "Meta-Heuristic Simulation for Protein Folding in 2D HP Lattice Model: Improved Algorithm with Customized Parameter Tuning", Journal of Engineering, Science & Management Education(JESME), NITTTR, Ministry of Human Resource Development, Govt. of India, Bhopal (M.P.), ISSN No. 0976-0121, Vol. 4, Issue III (July-Sept 11), pp. 200-203, 2011.
	Garima Srivastava et al., "Parallel Recombinative Simulated Annealing Technique for PSP using the Subsequence Secondary Structures: A Novel Protein Fold Lock Model", International Journal of Advanced Research in Computer Science (IJARCS), indexed in: Index Copernicus, DOAJ, Open J Gate, Electronic Journal Library, New Jour, Science central.com, Ulrichs Web, Dayang Journal Sys., ISSN No. 0976-5697, Vol. 2, No. 5 (Sept-Oct 11), pp. 46-51, 2011.
	■ Garima Srivastava et al., "Application of Machine Learning Techniques to Study Biological Networks", The IUP Journal of Information Technology, ICFAI University Press, Hyderabad, ISSN No. 0973 – 2896, available at SSRN: http://ssrn.com/abstract=2064534, Vol. VII, No. 3, pp. 07- 20, 2011.
	Garima Srivastava et al., "Machine Intelligence Approach Towards Modern Biology: From Syntax To Semantics And Beyond", CBS E-Journal- Biz n Bytes, ISSN No. 0976-0458, Vol. 1 (Sep. 09), pp. 38-43, 2009.

	Garima Srivastava et al. "Towards Genetic Algorithm Approach to Protein Structure Prediction: An Overview", In Proc. National Conference on "Emerging Trends in Information Technology" (NCETIT'07), Shri G.S. Institute of Technology and Science, Indore (M.P.), pp. 272-278, 18-20 th December, 2007.
Seminars/ Conferences/ Symposiums (Paper Presented / Attended)	Presented Paper "METAVERSE: New Era of Technological Ecosystem" in ICSSR Sponsored National Seminar on "Recent Trends in Information Technology", organized by PG Department of IT, GGDSD College, 25 th March, 2022.
	 Attended ICSSR sponsored National Seminar on Reforms to Transform India, held in GGDSD College, Chandigarh, 27th March, 2018.
	Attended ICSSR sponsored National Seminar on "The Demographic Dividend and India's Economic Future", held at GGDSD College, Chandigarh, 18 th Nov., 2015.
	 Attended <i>National Conference</i> on "Role of New Technologies in Conservation of Environment", held in School of Environmental Biology, A.P.S. University, Rewa(M.P.), 23rd - 24th March, 2012.
	Attended <i>National Symposium</i> on "Recent Advances in Biological Sciences", held in DAV College, Sec-10, Chandigarh, sponsored by DBT, Govt. of India, New Delhi, 6 th – 7 th November, 2009.
	Presented Paper "Application of Machine Learning Techniques to Explore Complex Networks in Cell Biology: Simulating the Language of 'Living' Cells'', In Conf. Proc.: National Conference on Information Management, Computing And Security (IMCS '09), Chandigarh Business School, Landran (Mohali), 3 rd November, 2009.
	Presented Paper "The State-of-the-Art Machine Learning Strategy for Predicting Protein Conformation from DNA Sequence: Progress and Prospects", In Conf. Proc.: National Conference on Information Management, Computing And Security (IMCS '09), Chandigarh Business School, Landran (Mohali), 3 rd November, 2009.
	 Attended <i>UGC Sponsored Seminar</i> on "Use of VOIP in Education", held in DAV College, Sector-10, Chandigarh, 11th February, 2009.
Refresher Courses/ Workshops/ Training	Attended IP Awareness Training Program under National Intellectual Property Awareness Mission Organized by Intellectual Property Office, India, 26 th April, 2024.
Programmes	Attended One Day National Workshop on 'Natural Language Processing' Organized by Department of Computer Science and Applications (DCSA), Panjab University, Chandigarh, 27 th March, 2024.
	Attended Two Weeks Workshop on 'Orientation & Sensitization Programme - NEP2020' under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission organized by UGC-Malaviya Mission Teacher Training Centre (MMTTC), Panjab University, Chandigarh, 1 st - 14 th Feb, 2024.

- Attended Workshop on "Future of Innovation and Research: An Impact of Information Technology on Academic Spheres, organized by Readers Club of College Library, GGDSD College, 5th August 2023.
- Attended *Ten Days FDP Workshop* on "Predictive Analytics using IBM SPSS Modeler Advance Course", IBM Developer Skills Network, IBM Career Education Program, IBM-India, 19th-30th December, 2022.
- Attended One Week FDP on "Blockchain Technology", conducted by Electronics & ICT Academy, IIT Roorkee at PML Business School, Chandigarh, 20th 24th January, 2020.
- Attended Lecture-cum-Workshop on "Indian Research Information Network System (IRINS)", organized under aegis of RUSA, DHE, Chandigarh Administration, held in GGDSD College, 1st December, 2018.
- Attended *Instructional Skills Workshop (one week FDP)*, conducted by University of the Fraser Valley, CANADA, in association with GGDSD College, Chandigarh, 22nd 28th May, 2017.
- Attended Workshop on "Academic publishing: Way to increase the visibility of your research" Sponsored by Rashtriya Uchchatar Shiksha Abhiyan (RUSA), DHE, Chandigarh Administration, organized by GGDSD College, Chandigarh, 31st March, 2017.
- Attended Hands on Workshop on Cloud Computing conducted by Aa2it SASIT Mohali, held at GGDSD College, Chandigarh, 5th November, 2016.
- Attended Workshop on "Automation System in Education Sector" Sponsored by Rashtriya Uchchatar Shiksha Abhiyan (RUSA), DHE, Chandigarh Administration, organized by GGDSD College, Chandigarh. Attended Two Sessions Workshop on " Use of e-Resource Contents /Learning Exchange System-Teaching Methodology, & Campus Management System /Monitoring of Students Progression –ERP", 18th -20th February, 2016.
- Attended Two Days Workshop on "JAVA & PHP for Bioinformatics Data Analysis and Management", held in GGDSD College, Chandigarh, under aegis of 'Star College Scheme', DBT, Govt. of India, New Delhi, 15th 16th February, 2014.
- Attended Two Day Workshop on "Instrumentation Techniques in Chemistry", held in GGDSD College, Chandigarh, sponsored by DBT, Govt. of India, New Delhi, 17th – 18th January, 2014.
- Attended *Two Days Workshop* on "Patents: Empowering Biotech Industry", held in GGDSD College, Chandigarh, under aegis of 'Star College Scheme', DBT, Govt. of India, New Delhi, 15th – 16th November, 2013.
- Attended the *National Workshop* on "Computational Approaches for Predicting Molecular Interactions", held in the Institute of Microbial Technology (IMTECH), Bio-informatics Centre, Sector 39-A, Chandigarh, sponsored by DBT, New Delhi, 9th -12th October, 2007.

	 Attended "Robotics Workshop And Competition", organized by National Academy of Sciences, Allahabad, 23rd – 24th February, 1999.
Invited Talks/ Expert Lecture	■ Delivered Expert Lecture and worked as Member, Core Academic Committee, in National Workshop on "Machine Learning and Data Mining Techniques in Bioinformatics", organized by Bioinformatics Centre, Department of Computer Science, A.P.S. University, Rewa (M.P.), sponsored by DBT, Govt. of India, New Delhi, 1 st to 4 th of March, 2012.
	■ Delivered Expert Lecture and worked as Member, Core Academic Committee, in National Level Short Term Training Program on "Learning Bioinformatics Tools and Programming Techniques for Teaching and Research Purpose", organized by Bioinformatics Centre, Department of Computer Science, A.P.S. University, Rewa (M.P.), sponsored by DBT, Govt. of India, New Delhi, 9 th to 21 st of January, 2012.
	GGDSD College, Chandigarh:
Administrative Experience / Member of Committee / Responsibilities / Work Assignments	 Assistant Superintendent (Outside-Evening), Panjab University Final Examinations (Odd Semester End Exams), Centre No. 33, GGDSD College, November-December, 2024.
	 Member, Admission Committee: Centralized Admission Process (DHE) BCA 1st Year (2022-23, 2023-24), BCA(Hons) NEP 1st Year (2024-25). Non-Centralized Admission Process, BA 3rd Sem (2018 to 2022).
	■ Member, BA Section Committee- 2023-24, 2024-25.
	Member, Organizing Team, For Expert Session on "Start-up Ecosystem Enablers" and "Business Model Canvas", Jointly organized by IIC, GGDSD College and Phoenix Computer & Ideation Club, PML SD Business School, 28th August, 2023.
	Member, Organizing Team, ICSSR Sponsored National Seminar on "Recent Trends in Information Technology", organized by PG Department of IT, GGDSD College, 25 th March, 2022.
	 Member, Organizing Team, Online-7 Days National FDP on "Re-Engineering the Role of Teachers as Mentors", organized by HRDC, PU in association with GGDSD College under aegis of RUSA, 22nd -28th July, 2021.
	 Member, Prospectus Committee, GGDSD College, 2018-19, 2019-20, 2020-21. For preparation and documentation of the College Prospectus and 5 page / 25 page Joint Prospectus for DHE.
	■ <i>Member, Statistical Cell Committee</i> , GGDSD College, 2018- till date.
	 Member of Content Creation Team-Criteria VI & Departmental Inputs Team for Self Study Report (SSR -2017) for NAAC, 2017.
	■ Member, IQAC / Team Member for IQAC, GGDSD College, 2015-2017.

Worked for preparation and documentation of AQAR, SSR, departmental evaluative reports and minutes of meetings conducted. With co-members, prepared final presentation for College and IQAC (2015-17).

- Member, Editorial Committee, GGDSD College Year Book, for preparation of complete draft of college progress, achievements & academic execution for year 2013-14, 2014-15, 2015-16.
- Member, Editorial Committee, GGDSD College News Clipping Book, for collection of news clippings of college related events/ activities under different categories of student admission, student results, cultural activities, sports, seminars/workshops/FDPs /lecture series and general news published for year 2013-14, 2014-15, 2015-16.
- Other key responsibilities Worked as team member for documentation and presentation of DDU Kaushal Kendra to UGC Delhi, 2017. Worked for publication of college details in India Today (Best Colleges issue) and 'India Today Best College Ranking' in different academic sessions. Working as team member for admission e-form checking and time table uploading on college ERP.

University / Other College:

- Paper Setter, Final Exams BCA (Computer System Architecture), BBA(Computer Application), B.Sc.(C++), Punjab Technical University, Jalandhar, April 2014.
- Paper Setter, Final Exams BCA (PC Hardware), Chandigarh University, 2012.
- External Examiner, Final Practical Examination(BCA/MCA), Punjab Technical University, in Chandigarh Engineering College, 2007-2010.
- Sub Examiner, Final (Annual) Exams- Spot Evaluation (Computer Science and Applications), Panjab University, for various graduate/post-graduate courses, 2008-2010.
- Project Supervisor, B.Sc. Hons (Bioinformatics), DAV College, Sector 10, Chandigarh, 2006-2011. Guided several dedicated projects intersecting emerging biological problems and applied computational approach with program implementation & software development.
- Head of Organizing Team, for management of technical sessions & conduction of Workshop / Program, A.P.S. University, Rewa(M.P.). Prepared complete Study Manual in National Level Short Term Training Program (January, 2012) and National Workshop (March 2012).