



Shaheed Rajguru College of Applied Sciences for Women
University of Delhi
Faculty Profile

Name	Prof. (Dr.) DEEPALI BAJAJ					
Designation	Professor Research Statistics – Citations: 580, h-Index: 9, i10-Index:9					
Email	deepali.bajaj@rajguru.du.ac.in					
Degree	Institution	Year				
Ph.D.	University of Delhi	2023				
M.Phil. (Comp Sc.)	Madurai Kamraj University	2008				
Areas of Interest / Specialization						
Natural Language Processing, Machine Learning, Cloud Computing, Microservices, Serverless Computing						
Publications Profile						
S. No.	Title of thePaper	JournalName	Year	Vol. No.	Page No.	ISSN No.
1.	Credit-Based Collaborative Filtering Approach: An Improvement in Recommender Systems	International Journal of Computer Trends and Technology	Mar 2014	9	356-361	2231-2803
2	A Review of Multi-Protocol Label Switching: Protocol for Traffic Engineering on Internet	International Journal of Computer Trends and Technology	May 2014	11	137-140	2231-2803
3	Regression Test Suite Minimization using Set Theory	International Journal of Advanced Research in Computer Science and Software Engineering	May 2014	4	502-506	2277 128X
4	Towards an understanding of Li-Fi: Next generation Visible Light Communication Technology	International Journal of Engineering and Computer Science	Apr 2015	4	11638-11641	2319-7242
5	Development of an Android based Mobile Application to Track Nutritional Intake of Young College Students	Journal of Basic and Applied Engineering Research	Jan 2016	3	75-78	2350-0077
6	Identifying Requirements for Big Data Analytics and Mapping to Hadoop Tools	International Journal of Recent Technology and Engineering	Sep 2019	8	4384-4392	2277-3878

7	Paas Providers And Their Offerings	International Journal of Scientific & Technology Research	Feb 2020	9	4009 - 4015	2277-8616	
8	A Prescriptive Model for Migration to Microservices Based on SDLC Artifacts	Journal of Web Engineering (River Publisher)	Jun 2021	20	817-852	1540-9589	
9	MUCE: a multilingual use case model extractor using GPT-3	International Journal of Information Technology (Springer Nature)	Feb 2022	14	1543–1554	2511-2104	
10	GreenMicro: Identifying Microservices From Use Cases in Greenfield Development	IEEE Access	Jun 2022	10	67008-67018	2169-3536	
11	CovFakeBot: a machine learning based chatbot using ensemble learning technique for COVID-19 fake news detection	International Journal of Artificial Intelligence and Soft Computing (InderScience Publisher)	Oct 2022	7	228-241	1755-4950	
12	A Comprehensive Microservice Extraction Approach Integrating Business Functions and Database Entities	The International Arab Journal of Information Technology (CCIS)	Jan 2024	21	32-45	1683-3198	
13	GTMicro - Microservice identification approach based on Deep NLP Transformer Model for Greenfield Developments	International Journal of Information Technology (Springer Nature)	Mar 2024	16	1-11	2511-2104	
14	SmartFace: An Offline-First AI-Based Attendance Management System for Rural Schools Using MobileFaceNet	International Journal of Innovation and Multidisciplinary Research	July 2026	6	104-113	2583-4452	

Awards and Distinctions

- Managing Editor - International Journal of Innovation and Multidisciplinary Research (IJAMR), ISBN – 2583 – 4452.
- Member of Syllabus Design Committee for the subjects “Theory of Computation”, “Discrete Structures”, “Database Management System”, “Research Methodology”, and “Cloud Computing” for B.Sc.(H) Computer Science in the Department of Computer Science, University of Delhi.
- Member of the Faculty of Mathematical Sciences under Statute 9 (3) (v), University of Delhi.
- Member of the Committee of Courses for both UG and PG levels in the Department of Computer Science, University of Delhi.
- Reviewer, of Delhi Board School Education (DBSE) Curriculum Review Committee.
- Appointed as experts for “MSME Idea Hackathon 2.0” (Theme-based), organised by the Ministry of MSME under MSME Innovative Scheme (Incubation component).

- Members of Skill Enhancement Council (University of Delhi) for Skill Enhancement Courses.
- Developed guidelines for SEC papers like No-Code, Low-Code Web Development, and Analytics using Python.
- Authored a book titled Document Preparation and Presentation Software, ISBN-978-93-6095-115-3, published by Authorspress, 2024.
- Contributed as trainer for “Certificate course in Lab Technology and Lab Management” conducted by the Centre for Innovation Skill-Based Courses under Open Learning Development Centre, SOL/COL, University of Delhi, from August 2025 to January 2026.
- Coordinator One-Week Online National Faculty Development Program “OFDP-103: Back-end, Front-end Web design & Development and App development using Flutter” from 27th October 2022 to 03rd November 2022, University of Delhi and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) of the Ministry of Education.
- Member of various selection committees at college and school levels.

Books Edited

S.No.	Title of theBook	Editorship*	Level of Publisher (National / International)	Publisher (with city/ country) & Year of Publication	ISBN
1	Big Data Analytics – I	Single Editor	International Authorspress	2024	978-93-6095-451-2
2	Big Data Analytics – II	Single Editor	International Authorspress	2024	978-93-6095-426-0
3	Conference Proceedings, National Conference on Advances in Electronics and Computer Applications NCAECA’16, 4-5 Feb, 2016	Joint Editor	National	Paramount Publication House 2016	978 – 93 – 5254 – 496 – 7
4	MBA course (MBAFT-6208: Management of Information Systems)	Joint Editor	National	Department of Distance and Continuing Education (DDCE), Campus of Open Learning, University of Delhi.	978-81-19169-14-6
5	BA Program - Operating System	Joint Editor	National	Department of Distance and Continuing Education (DDCE), Campus of Open Learning, University of Delhi.	978-81-19169-14-6

Chapter in Edited Books

S.No.	Title of EditedBook	Title ofChapter	Publisher	ISBN
1	Computer Society of India (CSI) Communications	Role of Hadoop in Big Data Analytics	CSI April 2017, Volume No. 41, Issue No. 1	9070-647X

2	World Congress on Disease, Health & Society: Issues, challenges, (Global Health: 2017)	Mobile Application to Track Nutritional Intake – a Smart Step towards Nutritional Security through m-Health	Krishi Sanskriti May 2017	978-93-85822-51-3
3	Lecture Notes on Data Engineering and Communications Technologies book series (LNDECT), Springer	Android Based e-Voting Mobile App Using Google Firebase as BaaS	Springer, Cham, Switzerland volume 39 Nov 2019	978-3-030-34514-3
4	Communications in Computer and Information Science book series (CCIS), Springer	Partial Migration for Re-architecting a Cloud Native Monolithic Application into Microservices and FaaS	Springer, Singapore volume 1170 Nov 2020	978-981-15-9670-4
5	Advances in Intelligent Systems and Computing book series (AISC), Springer	Sequential Workflow in Production Serverless FaaS Orchestration Platform	Springer, Singapore volume 1272 Jan 2021	978-981-15-8442-8
6	Lecture Notes in Electrical Engineering book series (LNEE), Springer	A Novel Design Approach Exploiting Data Parallelism in Serverless Infrastructure	Springer, Singapore volume 735 April 2021	978-981-33-6976-4
7	Lecture Notes in Networks and Systems book series (LNNS), Springer	Serverless Deployment of a Voice-Bot for Visually Impaired	Springer, Singapore volume 187 July 2021	978-981-33-6172-0
8	Communications in Computer and Information Science book series (CCIS), Springer	Setting up Hadoop Environment and Running MapReduce Job for Teaching BDA in Universities – An Experience	Springer, Singapore volume 1502 Jan 2022	978-981-16-8895-9
9	Introduction to Programming Using C++	Introduction to OOP	SOL, DU	978-81-19169-94-8
10	INTRODUCTION TO PROGRAMMING USING C++	Introduction and Basic Concepts of C++	SOL, DU	978-81-19169-94-8
Conferences				

S.No.	Title of Lecture/Paper	Invited Lecture/Resource Person/	Nature of Program me*	Details	Level**	Date of presentation
1	Exploring Big Data Analysis Pipeline and Comparative Summarization of Mining Tools	Paper presented	Conference	National Conference on Inspired Learning	National	16.10.15
2	Sentiment Analysis: A New Paradigm in Natural Language Processing	Paper Presented	Conference	National Conference on Advancements in Electronics and Computer Applications, 4th – 5th February. 2016, SRCASW	National	4.02.16
3	Development of an Electronic Voting System	Paper Presented	Conference	National Conference on Advancements in Electronics and Computer Applications, 4th – 5th February 2016, SRCASW	National	4.02.16
4	Health Buddy – Mobile based Nutritional intake Tracking Application for Young College Students	Paper Presented	Conference	National Conference on Advances in Food Science & Technology, 16-17, March 2016, SRCASW	National	16.03.16
5	Android Based Nutritional Intake Tracking Application for Handheld Systems	Paper Presented	Conference	International Conference on Computing, Communication and Networking Technologies 2017.July 3-5, 2017	International	03.07.17
8	Medbot: Conversational Artificial Intelligence Powered Chatbot for Delivering Tele-Health after COVID-19	Paper Presented	Conference	International Conference on Communication and Electronics Systems,	International	10.06.20

				IEEE, 10-12 June 2020		
9	Migration Strategies for Cloud Applications	Lightening Talk	Conference	International Conference on computing and Network Communication s, 14-17 Oct 2020, Chennai	Internatio nal	14.10.20
10	CoVShorts: News Summarization Application Based on Deep NLP Transformers for SARS-CoV-2	Paper Presented	Conference	International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO)03-04 Sep 2021	Internatio nal (within country)	04.09.21
11	TiGen - Title Generator based on Deep NLP Transformer Model for Scholarly Literature	Paper Presented	Conference	International Conference on Communication, Networks & Computing 8-10 Dec 2022	Internatio nal (within country)	10.12.22
12	Robo-Net: A Novel Reinforced Walking Biped Design Using an Augmented Random Search Approach in Augmented Reality	Paper Presented	IEEE	International Conference on Intelligent Systems and Industrial Automation (ARIIA-24), on [20-21, December 2024]	Internatio nal (within country)	

Research Projects Completed

Title	Status	Duration	Period	Total Grant	Funding Agency
Innovation Project Health Buddy-Android-based mobile application to track nutritional intake of young college students	PI	18 months	Aug 2015 - Feb 2017	4.0 Lakhs	University of Delhi, Innovation Desk

INVITED AS A RESOURCE PERSON

- Invited as a panellist on “AI in Academia: Opportunities, Challenges and Ethics”, as a part of Pre-Summit

activities for AI Impact Summit 2026 under India AI mission, on 9th February 2026 at Dyal Singh College, University of Delhi

- Invited as a keynote speaker for the “Research Methodology” workshop, on 23rd September 2025 at Vivekanand College, University of Delhi
- Invited as resource person to deliver a talk on "Role of Big Data Analytics in Library Information System" in a 7-day National FDP on “Recent Trends in Applied Science Teaching” organised by SRCASW
- Invited as resource person to deliver a talk on "LaTeX for Technical Writing" in the International workshop on “Future Libraries: Emerging Trends” organised by IGNOU on 25th Nov, 2018
- Invited as resource person to deliver a day-long hands-on workshop on "LaTeX: Tool for Technical Writing" in a UGC, DBT and CSEC (Delhi University) sponsored 7-day National Faculty Development Program (FDP) on "Recent Trends in Applied Science Teaching" from 21st -27th July, 2017
- Invited as resource person to deliver a 3-day session on “Core Java” in Bhartiya VidyaPeeth College of Engineering, IP University from 6th -8th July, 2015

ADMINISTRATIVE & GOVERNANCE ROLES

Administrative

- Deputy Superintendent of Examination
- Convener, Admission Committee
- Bursar
- Public Information Officer (PIO)
- Staff Council Secretary
- Member, Governing Body
- Member, Admission Grievance Committee
- Member, Proctorial Board
- Member, Timetable Committee

Academic & Development Committees

- Member, Academic Development Committee
- Member, IQAC (Internal Quality Assurance Cell)
- Member, NIRF (National Institutional Ranking Framework) Committee
- Member, Fee Concession & Scholarship Committee
- Member, Hostel Committee

Student & Placement Support

- Student Advisor
- Convener, Placement Cell
- Convener, Alumni Cell
- Convener, Placement Brochure Committee

Administrative & Resource Management

- Convener, Purchase Committee
- Coordinator, Software Development Committee
- Convener, Help Desk Committee
- Coordinator, CLP and DEH

Cultural & Welfare Initiatives

- Cultural Secretary
- Convener, Women Development Cell

CISCO Networking Academy (CNA)

- Co-ordinator
- Instructor