CURRICULUM-VITAE

Dr. Ranjit Rajak
Assistant Professor
Department of Computer Science and Applications(DCSA)
School of Mathematical and Physical Sciences (SMPS)
Dr.Harisingh Gour Central University(DHSGCU),
Sagar, M.P. Mobile:9479983806,
Email id: ranjit.jnu@gmail.com

Educations:

- ✓ **Ph.D.** *in* **Computer Science & Technology** *from School of Computer and System Sciences,* **Jawaharlal Nehru University(JNU)***, New Delhi[2014],*

- ✓ **M.Tech.** *in* **Computer Science & Technology** *with CGPA 8.12/9.00 from School of Computer and System Sciences,* **Jawaharlal Nehru University(JNU)***, New Delhi[2009],*

- ✓ **MCA** *with CGPA 6.33/ 9.00 from School of Computer and System Sciences,* **Jawaharlal Nehru University (JNU)***, New Delhi[2007]*

- ✓ **BCA** *with 64% from* **CCS Meerut University***, Meerut[2004]*

Achievements:

- ✓ *Qualified* **National Mathematics Olympiad** *Contest organized by All India School Mathematics Teachers Association. [2000]*

- ✓ *Qualified Competence in* **Software Technology (CST)-E level** *conducted by C-DAC, Pune[2004].*

- ✓ *Qualified* **JRF and NET** *in Computer Science and Application Conducted by UGC, New Delhi.[2012]*

Experience: More than 10 Years

- ✓ *Assistant Professor in Department of Computer Science and Applications, Dr. Harisingh Gour Central University, Sagar, MP* **(31st May 2013- Onwards).**

Research Area:

- ✓ *Parallel Computing,*
- ✓ *Scheduling Algorithms in Multiprocessor System & Cloud Computing.*

Subjects Taught:

- ✓ *Data Structures ,C Language ,OOPS(through C++ and Java)*
- ✓ *Design and Analysis of Algorithm*

I. Research Publications in Journals :28	
1.	**Ranjit Rajak** and et al **(2023)** "Study of Assortment of Measurement Techniques used for Localization in Wireless Sensor Network**, ", Journal of Wireless Personal Communication**, Springer, **[SCIE Indexed] [IF:2.05] [Under Review]**
2.	**Ranjit Rajak** and et al **(2023) "**An Efficient task scheduling model for the quality of service optimization in a Secure Cloud Computing Environment**" Cluster Computing**, Springer**, [SCIE Indexed] [IF:3.4], [Under Review]**.
3.	**Ranjit Rajak** and et al **(2023)** A Review and Analysis of Energy Efficiency Algorithms in Cloud Computing Environment(CCE", **Journal of Wireless Personal Communication**, Springer, **[SCIE Indexed] [IF:2.05] [Under Review]**
4.	**Ranjit Rajak** and et al **(2023)** Enhancing Workflow Scheduling Efficiency in Cloud Computing Environment: A Study of Load Balancing Method using Modified Min-Min Heuristic **Journal of Supercomputing, Springer, [SCIE Indexed] [IF:2.6] [Under Review]**
5.	**Ranjit Rajak** and et al **(2023)** Comprehensive Analysis of Heuristic Approaches for Workflow Scheduling in Cloud Computing Environment(CCE) **Journal of Supercomputing, Springer, [SCIE Indexed] [IF:2.6] [Under Review]**
6.	**Ranjit Rajak and et al, (2023)"** A Critical Review and Analysis of Load Balancing Methods in Cloud Computing Environment", **Journal of Wireless Personal Communication**, Springer, **[SCIE Indexed] [IF:2.05] [Under Review]**
7.	**Ranjit Rajak and et al. (2023)"** Comparative Analysis of Machine Learning Algorithms in Breast Cancer Classification" **Journal of Wireless Personal Communication**, Springer **[SCIE Indexed] [IF:2.05]**
8.	**Ranjit Rajak and et al, (2023) "**A systematic review of workflow scheduling techniques in a fog environment" in **International Journal of Experimental Research and Review.** Vol. 30, pp.100-108, **ISSN-2455-4855 [Scopus Indexed]**
9.	**Ranjit Rajak and et al, (2023)"** Load balancing techniques in cloud platform: A systematic study" in **International Journal of Experimental Research and Review.** Vol. 30, pp. 15-24 **ISSN-2455-4855 [Scopus Indexed]**
10.	**Ranjit Rajak** and et al. **(2023)** "The State of Art Digital Learning: Methodologies, Benefits, Tools, and Challenges" in **Journal of Theoretical and Applied Information Technology,** April 2023 Vol.101(7) pp.170- 177, ISSN 1992-8645,**[Scopus Indexed]**
11.	**Ranjit Rajak** and et al **(2023)** "A Novel Technique to Optimize Quality of Service (QoS) parameters for

	Directed Acyclic Graph (DAG) Scheduling in Cloud Computing Environment using Heuristic Approach" **Journal of Supercomputing, Springer** , Vol. 79, PP. 1956-1979 **[SCI Indexed] [IF: 2.6]**
12.	**Ranjit Rajak and et al (2022)** "A Workflow Scheduling Method for Cloud Computing Platform" , **Wireless Personal Communication, Springer,** Vol. 126, pp. 3625–3647 **[SCIE Indexed] [IF:2.05]**
13.	**Ranjit Rajak and et al (2022)** "E-Commerce with Fog-Enabled Cloud Computing: Framework, Opportunities and Challenges" **Journal of Theoretical and Applied Information Technology,** Vol.100(13), pp**.**4941-4954, ISSN 1992-8645 **[Scopus Indexed]**
14.	**Ranjit Rajak and et al (2022) "**Integration of Big Data and Cloud Computing: Tools, Issues, and Reliability" *SSRG* **International Journal of Engineering Trends and Technology (IJETT).** Vol.70(11),pp**.** 170-177, **[Scopus Indexed].**
15.	**Ranjit Rajak and et al** (2020)"A Systematic Study of Fog Computing: Issues, Challenges and Applications" **Journal of Green Engineering,** Vol. 1. No.9,pp.6569-6579, 2020. **[Scopus Indexed]**
16.	**Ranjit Rajak** (2020)"" Cluster Computing: Emerge Technology, Benefits, Architecture, Tools and Applications" **International Journal of Advanced Science and Technology**, Vol. 24. No.4, pp.4008-4015, 2020 **[Scopus Indexed]**
17.	**Ranjit Rajak**,**(2018)**" A Comparative Study : Taxonomy of High Performance Computing" **International Journal of Electrical and Computer Engineering (IJECE)** Vol. 8, No. 5, October 2018, pp. 3386-3391. **[Scopus Indexed]**
18.	**Ranjit Rajak**,**(2015)** " A Novel Approach for Task Scheduling in Parallel Computing using Priority Attributes" **Journal of Smart Computing Review**, South Korea,Vol5.No.4,pp.356-367, ISSN 2234-4624,Aug., 2015, **,[DBLP Indexed]**
19.	**Ranjit Rajak and et al (2015)**" Arbitrary Processor Network Scheduling Algorithms in Parallel Computing" **Journal of Smart Computing Review**, South Korea,Vol5.No.3, pp.126-134, ISSN2234-4624, June,2015,**[DBLP Indexed]**
20.	**Ranjit Rajak and et al (2015)** " Review of Task Duplications Based(TDB) Scheduling Algorithms." **Journal of Smart Computing Review**, South Korea,Vol.5 No.1,pp.67-75, ISSN 2234-4624,Feb.2015**,[DBLP Indexed]**
21.	**Ranjit Rajak**, **and C.P.Katti (2015)** "Static Task Scheduling Algorithm with Minimum Distance for Multiprocessor System (STMD)" **Journal of Smart Computing Review**, South Korea,Vol5.No.2,pp.113-125, ISSN 2234-4624, April, 2015, **,[DBLP Indexed]**
22.	**Ranjit Rajak and et al (2014) "**A Critical-Path and Top-Level attributes based Task Scheduling Algorithm

	for DAG (CPTLT)" **International Journal of New Computer Architectures and Their Applications**, Hong Kong, ISSN 2220-9085, Vol.4 No.3, pp. 130-136, July 2014
23.	**Ranjit Rajak**, **and et al (2014)** "Classification of List Task Scheduling Algorithms : A Short Review Paper" , **Journal of Industrial and Intelligent Information**, USA, ,ISSN 2301-3745,Vol2.No.4,pp.320-323, ,2014
24.	**Ranjit Rajak and C.P.Katti (2014)**" A Study of Task Scheduling in Multiprocessor Environment" **Georgian Electronic Scientific Journal of Computer Science and Telecommunication**, Georgia (USA), ISSN 1512-1232,Vol.1 (41), pp.38-46, 2014
25.	**Ranjit Rajak and C.P.Katti (2013)**" A Modified Task Scheduling Algorithm of Task Graph without Communication Time", **International Journal of New Computer Architectures and Their Applications**, Hong Kong, ISSN 2220-9085, Vol.3 No.4, pp.88-93, 2013.
26.	**Ranjit Rajak and C.P.Katti (2013)** "Task Scheduling in Multiprocessor System using Fork -Join Method(TSFJ)", **International Journal of New Computer Architectures and Their Applications**, Hong Kong, ISSN 2220-9085,Vol.3 No.3, pp.47-53,2013**.**
27.	**Ranjit Rajak and C.P.Katti (2012)**"Comparison of BNP Class of Scheduling Algorithms Based On Metrics", **Georgian Electronic Scientific Journal of Computer Science and Telecommunication**, Georgia (USA), ISSN 1512-1232,Vol.2 (35), pp.35-44,2012.
28.	**Ranjit Rajak and C.P.Katti (2012)** "A Novel Approach for Task Scheduling in Multiprocessor System", **International Journal of Computer Application**, New York, Vol. 44(11), pp:12-16, April2012
II. Book Chapters: 12	
29.	**Ranjit Rajak** and et al**(2022),** "Integrating Cybernetics into Healthcare System: Security Perspective", Edited Book in Computational Intelligent Security in Wireless Communications, **Taylor & Francis [Scopus Indexed]**
30.	**Ranjit Rajak and et al(2022), "**Algebraic Particle Swarm Optimization with Simulated Annealing Algorithm for Capacitated Vehicle Routing Problem" Edited Book in Artificial Intelligence in Cyber Physical Systems: Principles and Applications., **Taylor & Francis [Scopus Indexed]**
31.	**Ranjit Rajak and et al. (2022),"**Computing Paradigms: Cloud and Fog Computing", Advances In Computer Science, Vol.15 Edited Book by Mukesh Singla & Manisha Verma, **Akinik Publication , New Delhi.**
32.	**Ranjit Rajak and et al.(2022), "**Study of Heuristic Approaches in Workflow Scheduling in Cloud Platform", Advances In Computer Science, Vol.15 Edited by Mukesh Singla & Manisha Verma, **Akinik Publication , New Delhi.**

33.	**Ranjit Rajak and et al.(2022), "**A Study of Parameters in Energy Efficient Aware Workflow Scheduling in Computing Environment", Advances In Computer Science, Vol.15 Edited by Mukesh Singla & Manisha Verma, **Akinik Publication , New Delhi.**
34.	**Ranjit Rajak and et al.(2022),** " Green Cloud Computing(GCC): Benefits, Metrics and Futuristic Research" Advances In Computer Science, Vol.15 Edited Book by Mukesh Singla & Manisha Verma, **Akinik Publication , New Delhi.**
35.	**Ranjit Rajak**, Selot K. **(2021)** Internet of Things (IoT): State-of-the-Art Technologies, Challenges and Applications. In: Agrawal S., Kumar Gupta K., H. Chan J., Agrawal J., Gupta M. (eds) Machine Intelligence and Smart Systems. Algorithms for Intelligent Systems. **Springer, Singapore**. **[WoS Indexed]**
36.	**Ranjit Rajak(2021)**," Performance Metrics for Comparison of Heuristics Task Scheduling Algorithms in Cloud Computing Platform "Edited Book :Machine Learning Approach for Cloud Data Analytics in IoT, **Wiley Publication** . **[Scopus Indexed]**
37.	**Ranjit Rajak (2020),** "Role of ICT in Skill Development of India" in Edited Book: Entrepreneurial Sustainablity on Crossroads , **Shivam Book House(P),Jaipur**
38.	**Ranjit Rajak., (2018)** Modified Critical Path and Top-Level Attributes (MCPTL)-Based Task Scheduling Algorithm in Parallel Computing. In: Pant M., Ray K., Sharma T., Rawat S., Bandyopadhyay A. (eds) in Intelligent Systems and Computing,vol583. **Springer, Singapore,2018 [Scopus Indexed]**
39.	**Ranjit Rajak(2018)** Deterministic Task Scheduling Method in Multiprocessor Environment. In: Singh M., Gupta P., TyagiV., FlusserJ., ÖrenT. (eds) Advances in Computing and Data Sciences. ICACDS 2018.Communications in Computer and Information Science, vol905.**Springer, Singapore[Scopus Indexed]**
III.	**International Conferences: 09**
40.	**Ranjit Rajak and et. al . ,(2023),"** "Comprehensive Study of Workflow Scheduling in Fog Computing Platform" in 2nd International Conference on Recent Trends in Mathematical, Physical & Computational Sciences-2023" (ICRTMPCS 2023), Department of Mathematics and Statistics, Dr. Harisingh Gour Vishwavidyalaya, Sagar during 17 to 19 March 2023.
41.	**Ranjit Rajak and et. al ,(2023),"**. "Workflow Scheduling in Cloud Environment using Artificial Intelligence: A Review" in 2nd International Conference on Recent Trends in Mathematical, Physical & Computational Sciences-2023" (ICRTMPCS 2023), Department of Mathematics and Statistics, Dr. Harisingh Gour Vishwavidyalaya,Sagar during 17 to 19 March 2023.

42.	**Ranjit Rajak and et. al** . ,(2023)," "Workflow Load balancing Strategy with Duplication in Cloud Computing Platform" in 2nd International Conference on Recent Trends in Mathematical, Physical & Computational Sciences-2023" (ICRTMPCS 2023), Department of Mathematics and Statistics, Dr. Harisingh Gour Vishwavidyalaya,Sagar during 17 to 19 March 2023.
43.	**Ranjit Rajak,(2023),"** A Comparative Analysis of Load Balancing Heuristic Approaches in Cloud Computing Platform" in International Conference On Emerging Computational Intelligence ICECI-2023 February 11-12, 2023, AMU(UP)
44.	**Ranjit Rajak, (2022) "**Data Science and Its future Application", *Presented in 10th International Conference on "Drift and Research Shift in Pharm-Ag, Engineering and Science"* on Feb. 27-28, 2022
45.	**Ranjit Rajak**,(2021)"The Perspective of Digital Education in Covid-19 Pandemic", Presented in 9th International Conference on "Current Research Trends in Pharmacy, Engineering, Agriculture, Science, Technology and Management during Pandemic" on 27-28 February 2021, SVN, Sagar (M.P.)
46.	**Ranjit Rajak**,(2021) "Taxonomy for Workflow Scheduling in Homogenous Computing Platform" Presented in 9th International Conference on "Current Research Trends in Pharmacy, Engineering, Agriculture, Science, Technology and Management During Pandemic" on 27-28 February 2021, SVN, Sagar (M.P.).
47.	**Ranjit Rajak**, (2020) "Energy Efficiency using DVFS Method in Cloud Computing : A Review" is presented in 8th International Conference on "Innovative Research Practices in Pharma, Science, Management, Agriculture and Technology" on 27-28 February 2020, SVN, Sagar (M.P.)
48.	**Ranjit Rajak**, (2020)A Study of Performance Metrics for Static Task Scheduling in Multiprocessor System, is **presented** in 8th International Conference on "Innovative Research Practices in Pharma, Science, Management, Agriculture and Technology" on 27- 28 February 2020, SVN, Sagar (M.P.)
	**IV. Research Guidance**
✓	**P.G. Dissertation :** M.Tech(CSE) =01 and MCA= 05
✓	**Ph.D. Guidance : 04(Running)** a. Anjali Choudhary Topic: Cloud Computing b. Aakriti Jain Topic: Fog Computing c. Kanchan Namdev Topic: Cloud Scheduling using Machine Learning d. Ruchi Jain Topic: Reliability Issues in Fog Computing
	**V. Orientation/Refresher Course/Seminar/FDP/STC**
✓	**Seminar participation** of 9 Days(10th Jan. 2012-18th Jan.2012) on Leadership and Personality Development @ Galgotias University, Greater Noida(U.P)
✓	**Orientation Course participation** of 27 Days(18th Dec.2014 to 14th Jan. 2015) @ UGC –HRDC,

	Dr.Harisingh Gour Central University,Sagar(M.P)
✓	**Refresher Courseparticipation**of 21 Days(21[th]Dec.2016 to 10th Jan. 2017)on ICT @ UGC –HRDC, Dr.Harisingh Gour Central University, Sagar(M.P)
✓	**Faculty Development Program (FDP) participation** of 5 Days(14th Oct. to 18th Oct.2019) on Cyber Security @ Dr.Harisingh Gour Central University, Sagar(M.P) Sponsored by AICTE under the Scheme of ATAL program
✓	**Faculty Development Program (FDP) participation** of 5 Days (9th May to 13th May 2020) on Data Sciences@ Dr.Harisingh Gour Central University,Sagar(M.P) Sponsored by AICTE under the Scheme of ATAL program.
✓	**Faculty Development Program (FDP)participation** of 5 Days(18[th]May to 22nd May 2020) on Cyber Security @ Dr.HarisinghGour Central University,Sagar(M.P) Sponsored by AICTE under the Scheme of ATAL program.
✓	**Faculty Development Program (FDP) participation**of 5 Days(25th May to 29th May 2020) on Artificial Intelligent @ Dr.Harisingh Gour Central University, Sagar (M.P) Sponsored by AICTE under the Scheme of ATAL program.
✓	**Faculty Development Program (FDP)participation**of 5 Days(5th Oct. to 9th Oct. 2020) on Internet of Things(IoT) @ BBAU, Lucknow(U.P.) Sponsored by AICTE under the Scheme of ATAL program
✓	**Faculty Development Program (FDP) participation** of 6 Days(18th Oct. to 23rd Oct. 2020) on Teacher,Teaching and Teacher Education: Processes, Concerns and Prospects,TLC @ Dr.Harisingh Gour Central University, Sagar(M.P) Sponsored by AICTE under the Scheme of ATAL program.
✓	**Faculty Development Program (FDP)participation** of 5 Days(26th Oct. to 30th Oct. 2020) on Cloud Technology @ Sponsored by AICTE under the Scheme of ATAL program.
✓	**Short Term Course(STC)** of 6 Days (18th Jan. 2021 to 23rd Jan. 2021) on Use of MATLAB in Research UGC-Sponsored, HRDC, Dr.Harisingh Gour Central University, Sagar(M.P).
	VI. Reviewer
✓	International Journal of New Computer Architectures and Their Applications, Hong Kong
✓	International Journal of E-Learning and Digital Media, SAGE publication **Scopus Indexed**
✓	Turkish Journal Of Electrical Engineering & Computer Sciences, Turkey ,**SCI Indexed[IF=0.68]**
✓	IEEE Transaction on Cloud Computing, New York ,**SCI Indexed[IF=5.96]**.
✓	IEIE Transactions on Smart Processing & Computing, S.Korea, **Scopus Indexed**.

✓	KSII Transactions on Internet and Information Systems, S.Korea , **SCI Indexed[IF=0.71].**
VII. As Invited Talk /Resource Person	
✓	A Study of Performance Metrics for Static Task Scheduling in Multiprocessor System in 8th International Conference on "Innovative Research Practices in Pharma, Science, Management, Agriculture and Technology" on 27- 28 February 2020, SVN, Sagar (M.P.) **[Invited Talk]**
✓	Cyber Crime and Computer Network in Institute of Distance Education, Dr.Harisingh Gour Central University, Sagar (M.P.) on 10th Feb. 2020.**[Resource Person]**
✓	Domain Name System (DNS) in Institute of Distance Education, Dr.Harisingh Gour Central University, Sagar (M.P.) on 11th Feb. 2020. .**[Resource Person]**
✓	ERP,MIS and DBMS in Institute of Distance Education, Dr.Harisingh Gour Central University, Sagar (M.P.) on 12th Feb. 2020. .**[Resource Person]**
✓	Evaluation of the Presentation of the Research Proposals by the participants in the 4th Faculty Induction Programme (27th Jan. 2021- 02nd March 2021) on 1st March2021.Organised by UGC-HRDC, Dr. Harisingh Gour Central University, Sagar (M.P.) .**[Resource Person]**
✓	Evaluation of Micro-Teaching by the participants on 13th Sept. 2021 in the Inter/Multi-disciplinary Refresher Course on "Relation of Indian History with Science and Technology",3rd Sept. -16th Sept. 2021 Organized by UGC- HRDC, Dr.Harisingh Gour Central University, Sagar(M.P.). **[Resource Person]**
✓	Research Metrics in FIVE DAYS, Faculty Development Programme Course on ' Publication and Research Ethics" in Online Mode during the period 7th Sept to 11th Sept 2021. Sponsored by AICTE Training and Learning(ATAL) Academy Program, New Delhi organized by Department of Commerce, Dr.Harsingh Gour Central University, Sagar(M.P.). **[Resource Person]**
✓	Evaluation of the Presentation of the Research Proposals by the participants in Refresher Course on Criminology in 21st Century (1st Sept. 2021- 14th Sept. 2021) on 10th Sept. 2021.Organised by UGC-HRDC, Dr. Harisingh Gour Central University, Sagar (M.P.) .**[Resource Person]**
VIII. Technical Program Committee (TPC)	
✓	INDIACom International Conference, New Delhi. 3rd International Conference on Advanced Informatics for Computing Research(ICAICR-2019),15-16June, 2019, Solan H.P., India
✓	International Conference on Computing, Communication and Automation ICCCA), Galgotias University, Noida U.P., India.
✓	International Conference on Artificial Intelligence Techniques for IoT Data Analytics Applications (AIIoTDA)

	25th-27th July 2019.
✓	International Conference on Advances in Engineering Science Management & Technology 2019 Uttaranchal University, Dehradun, Uttarakhand, India on March 14-15, 2019
✓	4th International Conference on Next Generation Computing Technologies, (NGCT' 2018),21-22 Nov. 2018, Dehradun
✓	National Seminar on Digital India : Use of Technology for Transforming Society 28-29th Jan. Gaya India.
✓	5th International Conference On Reliability, Infocom Technologies And Optimization (ICRITO 2016)
IX. **Contributions at University (DHSGCU) Level**	
✓	**Coordinator,** Conducted five days FDP on Data Sciences under the Scheme of ATAL-AICTE, funded**(1.62 laks)** by AICTE ,New Delhi
✓	**Convener ,**Department Post Graduate Committee (DPGC) Department of Computer Science and Application, Dr.Harisingh Gour Central University, Sagar(M.P)
✓	**Member, Board of Studies(BOS),** Department of Computer Science and Application, Dr.Harisingh Gour Central University, Sagar (M.P)
✓	**Member, Board of Studies(BOS),** Department of Computer Science, Govt. P.G.Girls College(Autonomous),Sagar
✓	**Member, School Board** for **School of Mathematical & Physical Sciences,** Dr.HarisinghGour Central University,Sagar (M.P)
✓	**Member, Research Advisory Committee(RAC),** Department of Computer Science and Application, Dr.HarisinghGour Central University, Sagar(M.P)
✓	**Member, Research Advisory Committee(RAC),** Department of Mathematics and Statistics, Dr.HarisinghGour Central University, Sagar(M.P)
✓	**Member, Research Degree Committee (RDC),** Department of Computer Science and Application, Dr.Harisingh Gour Central University, Sagar(M.P)
✓	**Placement In-Charge,** Department of Computer Science and Application, Dr.Harisingh Gour Central University, Sagar(M.P)
✓	**Member, Technical Committee** for procurement of **Goods & Services from GeM (Government e-Marketing)** Dr.Harisingh Gour Central University, Sagar(M.P)
✓	**Member, Central Purchase Committee (CPC),** Dr. Harisingh Gour Central University, Sagar(M.P)
X. **Membership of Professional Bodies/Societies**	

✓	International Association of Engineers (IAENG), Life Time(Membership id 187064
✓	Computer Society of India (CSI)
✓	Academy & Industry Research Collaboration Center (AIRCC), Life Time (Membership id 128858)

I hereby declare that all the above-mentioned information are given by myself and are true to the best of my knowledge.

Date: 26-05-2023

Dr. Ranjit Rajak