

# 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),  
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## **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** from School of Computer and System Sciences, **Jawaharlal Nehru University(JNU)**, New Delhi[2009]
- ✓ **MCA** from School of Computer and System Sciences, **Jawaharlal Nehru University (JNU)**, New Delhi[2007]
- ✓ **BCA** 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]

## **Employment (Academic)**

- ✓ Assistant Professor, DCSA, DHSGCU, 31<sup>st</sup> May, 2013 –Present

## **Research Area**

- ✓ Parallel Computing,
- ✓ Scheduling Algorithms in Multiprocessor System,
- ✓ Cloud Computing.
- ✓ Soft computing, GA, PSO, CRO.

## **Subjects Taught**

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

## *Research Publications [Journals/Book Chapters/Conferences]*

2022

1. **Ranjit Rajak** and et al "A Novel Technique to Optimize Quality of Service (QoS) parameters for Directed Acyclic Graph (DAG) Scheduling in Cloud Computing Environment using Heuristic Approach" *Accepted in Journal of Supercomputing*, Springer [SCI Indexed] [IF: 2.6]
2. **Ranjit Rajak** "A Workflow Scheduling Method for Cloud Computing Platform" , *Accepted in Journal of Wireless Personal Communication*, Springer[ SCIE Indexed] [IF:2.05]
3. **Ranjit Rajak** "E-Commerce with Fog-Enabled Cloud Computing: Framework, Opportunities and Challenges" , *Accepted in International Journal of Computer Network and Information Security* [Scopus Indexed].
4. **Ranjit Rajak and et al**, "Algebraic Particle Swarm Optimization with Simulated Annealing Algorithm for Capacitated Vehicle Routing Problem" *Accepted in Artificial Intelligence in Cyber Physical Systems: Principles and Applications.*, CRC Press[Scopus Indexed] [Book Chapter]
5. **Ranjit Rajak and et al**, "Integrating Cybernetics into Healthcare System: Security Perspective", *Accepted in Computational Intelligent Security in Wireless Communications*, Taylor & Francis [Scopus Indexed] [Book Chapter]
6. **Ranjit Rajak**, "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.[ International Conference]
7. **Ranjit Rajak and et al**. "Green Cloud Computing (GCC): Benefits, Metrics, and Futuristic Research" , *Accepted in National Publication , New Delhi.*[ Book Chapter]
8. **Ranjit Rajak and et al**. "Computing Paradigms: Cloud and Fog Computing" , *Accepted in National Publication , New Delhi.*[ Book Chapter]
9. **Ranjit Rajak and et al**. "A Study of Workflow Scheduling using Heuristic Approaches in Cloud Platform " , *Accepted in National Publication , New Delhi.*[ Book Chapter]
10. **Ranjit Rajak** and et al "Study of Assortment of Measurement Techniques used for Localization in Wireless Sensor Network"[Under Review].
11. **Ranjit Rajak**, "Role of Task Parameters and Task Attributes for Workflow Scheduling in Cloud Environment" [Under Review]
12. **Ranjit Rajak** and et al. "The State of Art Digital Learning: Methodologies, Benefits, Tools, and Challenges" [Under Review]
13. **Ranjit Rajak and et al.**" Comparative Analysis of Machine Learning Algorithms in Breast Cancer Classification" [Under Review].
14. **Ranjit Rajak and et al**, " A Systematic Study of Load Balancing Methods in Cloud Computing Environment" [Under Review].

15. **Ranjit Rajak and et al,**“ Comprehensive Study of Workflow Scheduling in Fog Computing Environment”, **[Under Review]**.

## 2021

16. **Ranjit Rajak,**“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.). **[Conference]**
17. **Ranjit Rajak,** “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.). **[Conference]**
18. **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][Book Chapter]**
19. **Ranjit Rajak,**“ Performance Metrics for Comparison of Heuristics Task Scheduling Algorithms in Cloud Computing Platform “**Accepted** in Machine Learning Approach for Cloud Data Analytics in IoT, Wiley .  
**[Scopus Indexed] [Book Chapter]**

## 2020

20. **Ranjit Rajak,**“A Systematic Study of Fog Computing: Issues, Challenges and Applications" **Journal of Green Engineering**, Vol. 1. No.9,pp.6569-6579, 2020
21. **Ranjit Rajak,**“ Cluster Computing: Emerge Technology, Benefits, Architecture, Tools and Applications” **International Journal of Advanced Science and Technology**, Vol. 24. No.4, pp.4008-4015, 2020
22. **Ranjit Rajak** Role of ICT in Skill Development of India is **accepted [Book Chapter]**
23. **Ranjit Rajak,** “Energy Efficiency using DVFS Method in Cloud Computing : A Review” is **presented** in 8<sup>th</sup> International Conference on “Innovative Research Practices in Pharma, Science, Management, Agriculture and Technology” on 27-28 February 2020, SVN, Sagar (M.P.)**[Conference]**
24. **RanjitRajak,** A Study of Performance Metrics for Static Task Scheduling in Multiprocessor System, is **presented** in 8<sup>th</sup> International Conference on “Innovative Research Practices in Pharma, Science, Management, Agriculture and Technology” on 27- 28 February 2020, SVN, Sagar (M.P.)**[Invited Talk in Conference]**

## 2018

25. **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.**[Book Chapter]**
26. **Ranjit Rajak,**“ 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

27. **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 [Book Chapter]

## 2015

28. **Ranjit Rajak**, Shobhit Gupta, Girish Kumar Singh, and Sanjay Jain" 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.**
29. Shobhit Gupta, **Ranjit Rajak**, Girish Kumar Singh, and Sanjay Jain" Arbitrary Processor Network Scheduling Algorithms in Parallel Computing" **Journal of Smart Computing Review, South Korea, Vol5.No.3, pp.126-134, ISSN 2234-4624, June, 2015**
30. **Ranjit Rajak**, "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**
31. Shobhit Gupta, **Ranjit Rajak**, Girish Kumar Singh and Sanjay Jain , " 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**

## 2014

32. **Ranjit Rajak** "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.4, 2014**
33. **Ranjit Rajak**, "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**
34. **Ranjit Rajak**, " 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**

## 2013

35. **Ranjit Rajak**, C.P.Katti, and NidhiRajak , " 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.**
36. **Ranjit Rajak**, "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.**

## 2012

37. **Ranjit Rajak**, "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.**
38. **Ranjit Rajak**, "A Novel Approach for Task Scheduling in Multiprocessor System", **International Journal of Computer Application, New York, Vol. 44(11), pp:12-16, April 2012**

### *Research Guidance*

- ✓ One **M.Tech. in Computer Science & Engineering**, Amity University Jaipur.

### *Orientation/Refresher Course/Seminar/FDP/STC*

- ✓ **Seminar participation** of 9 Days(10<sup>th</sup> Jan. 2012-18<sup>th</sup> Jan.2012) on Leadership and Personality Development @ Galgotias University, Greater Noida(U.P)
- ✓ **Orientation Course participation** of 27 Days(18<sup>th</sup> Dec.2014 to 14<sup>th</sup> Jan. 2015) @ UGC -HRDC, Dr.Harisingh Gour Central University,Sagar(M.P)
- ✓ **Refresher Course participation** of 21 Days(21<sup>th</sup> Dec.2016 to 10<sup>th</sup> Jan. 2017) on ICT @ UGC -HRDC, Dr.Harisingh Gour Central University, Sagar(M.P)
- ✓ **Faculty Development Program (FDP) participation** of 5 Days(14<sup>th</sup> Oct. to 18<sup>th</sup> 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 (9<sup>th</sup> May to 13<sup>th</sup> 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<sup>th</sup> May to 22<sup>nd</sup> May 2020) 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(25<sup>th</sup> May to 29<sup>th</sup> 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(5<sup>th</sup> Oct. to 9<sup>th</sup> 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(18<sup>th</sup> Oct. to 23<sup>rd</sup> 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(26<sup>th</sup> Oct. to 30<sup>th</sup> Oct. 2020) on Cloud Technology @ Sponsored by AICTE under the Scheme of ATAL program.
- ✓ **Short Term Course(STC)** of 6 Days (18<sup>th</sup> Jan. 2021 to 23<sup>rd</sup> Jan. 2021) on Use of MATLAB in Research UGC-Sponsored, HRDC, Dr.Harisingh Gour Central University, Sagar(M.P).
- ✓ **Refresher Course** of Two Week on Research Methodology & Data Analysis , scheduled to be held from 24<sup>th</sup> March to 07<sup>th</sup> April, 2021 , under the most coveted MHRD Sponsored Pandit Madan Mohan Malaviya

National Mission on Teachers and Teaching ( PMMMMNMTT) scheme , **Organized by Teaching Learning Centre, Ramanujan College, University of Delhi in association with Indian Accounting Association, NCR Chapter**

### *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]**.

### *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 1<sup>st</sup> March 2021.Organised by UGC-HRDC, Dr. Harisingh Gour Central University, Sagar (M.P.) . [**Resource Person**]
- ✓ Evaluation of Micro-Teaching by the participants on 13<sup>th</sup> Sept. 2021 in the Inter/Multi-disciplinary Refresher Course on “Relation of Indian History with Science and Technology”,3<sup>rd</sup> Sept. -16<sup>th</sup> 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 Programmes, 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 21<sup>st</sup> Century (1<sup>st</sup> Sept. 2021- 14<sup>th</sup> Sept. 2021) on 10<sup>th</sup> Sept. 2021.Organised by UGC-HRDC, Dr. Harisingh Gour Central University, Sagar (M.P.) . [**Resource Person**]

### *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 Uttarakhand 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 28-29<sup>th</sup> Jan. Gaya India.
- ✓ 5th International Conference On Reliability, Infocom Technologies And Optimization (ICRITO 2016)

### *Contributions at University (DHSVCU) Level*

- ✓ **Coordinator**, Conducted five days FDP on Data Sciences under the Scheme of ATAL-AICTE, funded(1.62 lacs) 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)

*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)