



TARUN BISWAS

Indian Institute of Information Technology Ranchi, India
Computer Science and Engineering

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HIGHLIGHTS

- A dedicated academician, having a passion for imparting knowledge.
- PhD, M.Tech and B.Tech all through Government / Central Government Institutions.
- Qualified GATE 2010 and 2017 (Computer Science and Engineering).
- 09+ years of teaching experience in NIT and IIIT.

EDUCATIONAL QUALIFICATION

Degree	Discipline	Institute	Year
Ph.D.	Computer Science and Engineering	National Institute of Technology Sikkim, India	Oct, 2020
M. Tech.	Computer Science & Engineering (IT)	National Institute of Technology Durgapur, India	2012
B.Tech	Information Technology	Government College of Engineering and Ceramic Technology Kolkata, India	2010

TEACHING EXPERIENCE (09+ YEARS)

Position	Institute	Regular/Contract	From	To
Assistant Professor	Indian Institute of Information Technology Ranchi, India (An Institute of National Importance, Government of India)	Regular	Dec 2021	Till date
Assistant Professor	National Institute of Technology Sikkim, India (An Institute of National Importance, Government of India)	Regular	Dec 2015	Dec 2021
Assistant Professor	National Institute of Technology Sikkim, India (An Institute of National Importance, Government of India)	Contract	Jan 2013	Dec 2015

ADMINISTRATIVE RESPONSIBILITIES

Position & Responsibilities	Institute	From	To
FIC- Research and Infrastructure	Indian Institute of Information Technology Ranchi, India	May 2022	Feb 2023
FIC- Students' Affairs	Indian Institute of Information Technology Ranchi, India	April 2022	Feb 2023
FIC- High Performance Computing Centre	National Institute of Technology Sikkim, India	June 2017	Sept 2021
GATE Coordinator- Under TEQIP-III	National Institute of Technology Sikkim, India	June 2017	Sept 2021

PUBLICATION SUMMARY (DETAILS IN ANNEXURE 1)

Publications	Published/Accepted	Σ Impact factor		
International Journal	07 SCI/E	28.853		
Conference papers	09 (All Scopus) (4 IEEE, 5 Springer) [1 at foreign venue] [2 IEEE best paper awards]			
Book chapters	01 (Scopus CRC Press)			
Google Scholar citation metrics	Citations: 147		h-index: 8	i10-index: 7

TEACHING INTEREST AND COURSES

<i>Courses taught</i>	<ul style="list-style-type: none"> • Undergraduate Programs (B.Tech) Operating Systems, Distributed and Parallel Computing, Data Structure and Algorithms, Fundamentals of Algorithms • Postgraduate/Ph.D Programs Edge and Fog Computing, Nature-Inspired Computing, High Performance Computing
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RESEARCH INTERESTS AND EXPERIENCE

Have been working in the areas of UAV based computing, mobile grid/cloud computing, edge/fog computing application
Eager to explore the areas of UAV assisted high-performance computing based application using Nature Inspired Computing, Quantum Inspired Computing.

OTHER RELEVANT INFORMATIONS -

<i>Editorial Board Member</i>	<i>Talk Delivered</i>	<i>Reviewership</i>
Journal of Mathematical Techniques and Computational Mathematics (SAGE)	FDP on "Cloud Computing-Challenges and Research Insights", 22-27 March, 2021, AICTE and NIT Sikkim	IEEE Access, Journal of System Architecture (Elsevier), Journal of Supercomputing (Springer) etc.

PUBLICATION DETAILS (ANNEXURE 1)

International JOURNAL (SCI/SCIE)

1. PKD Pramanik, **Tarun Biswas**, Prasenjit Choudhury, Multicriteria-based Resource-aware Scheduling in Mobile Crowd Computing: A Heuristic Approach, *Journal of Grid Computing*, Springer, Vol. 21, No. 1, pp. 1-29 (2022). **(Impact Factor: 4.674)**
2. Abhijeet Singh Thakur, **Tarun Biswas**, and Pratyay Kuila, "Binary Quantum-Inspired Gravitational Search Algorithm based Scheduling with Multi-criteria for Multi-Processor Computing Systems," *The Journal of Supercomputing* (Springer), Vol. 77, pp. 796-817 (2021) **(Impact Factor: 2.557)**.
3. **Tarun Biswas**, Pratyay Kuila, and Anjan Kumar Ray, "A Novel Scheduling with Multi-Criteria for High Performance Computing Systems: An Improved Genetic Algorithm Based Approach," *Engineering with Computers* (Springer), Vol. 35, No. 4, pp. 1475-1490 (2019), **(Impact Factor: 8.083)**.
4. **Tarun Biswas**, Pratyay Kuila, and Anjan K. Ray, "A Novel Workflow Scheduling with Multi-Criteria using Particle Swarm Optimization for Heterogeneous Computing Systems," *Cluster Computing* (Springer), Vol. 23, pp. 3255-3271, (2020) **(Impact Factor: 2.303)**.
5. **Tarun Biswas**, Pratyay Kuila, and Anjan Kumar Ray, "A Novel Resource Aware Scheduling with Multi-Criteria for Heterogeneous Computing Systems," *Engineering Science and Technology, an International Journal* (Elsevier), Vol. 22, No. 2, pp. 646-655 (2019) **(Impact Factor: 5.155)**.
6. **Tarun Biswas**, Pratyay Kuila, Anjan Kumar Ray, and Mayukh Sarker, "Gravitational Search Algorithm Based Novel Workflow Scheduling for Heterogeneous Computing Systems," *Simulation Modelling Practice and Theory* (Elsevier), Vol. 96, pp. 1-21 (2019) **(Impact Factor: 4.199)**.
7. **Tarun Biswas**, Rajat Bhardwaj, Anjan Kumar Ray, and Pratyay Kuila, "A novel leader election algorithm based on resources for ring networks," *Int. Journal of Communication Systems* (Wiley), Vol. 31, No.10, pp. 1-13 (2018), **(Impact Factor: 1.882)**

BOOK CHAPTER

- (1) Aditi Bose, **Tarun Biswas**, and Pratyay Kuila "Chapter 05: A Novel Genetic Algorithm Based Scheduling for Multi-core Systems," in **Smart Innovations in Communication and Computational Sciences-2018**, (Springer), Vol. 851, pp. 45-57, ISBN: 978-981-13-2413-0.

CONFERENCE PAPERS

1. Tarun Biswas and Pratyay Kuila, "Particle Swarm Optimization based Multi-criteria Scheduling for Multi-Core Systems," International Conference on Electrical and Electronics Engineering (ICE3-2020), IEEE, pp. 1-6 (2020). **(Best Paper Award)**.
2. Tarun Biswas, Pratyay Kuila and Anjan Kumar Ray, "Multi-level queue for task scheduling in heterogeneous distributed computing system," ICACCS 2017, IEEE, pp. 1-6 (2017). **(Best Paper Award)**
3. Santanu Ghosh, Pratyay Kuila, and Tarun Biswas, "An Energy Efficient Offloading Technique for UAV-Assisted MEC using Nature Inspired Algorithm", 10th FICTA 2022 (Springer),(Accepted).
4. Abisek Dahal, Santanu Ghosh, Pratyay Kuila and Tarun Biswas, "Trajectory Planning and Data Collection of UAVs over Disaster Affected Areas", 10th FICTA 2022 (Springer),(Accepted).