

**FACULTY PROFILE****BASIC PROFILE****ARINDAM ROY****Assistant Professor****Dept. of Computer Science & Applications**arcontai@gmail.com

Contact No: +91 9434801964

Academic Qualification: M.Sc, M.Tech, PhD

**SERVICE HISTORY**

Year of Joining	:	2008
Previous Employment, if any	:	Haldia Institute of Technology, Haldia, West Bengal, India (04.08.2003 to 04.08.2008)
Experience in Teaching	:	UG: 14 years PG: 5 years

Area of Teaching: COMPUTER LANGUAGES, C, C++, JAVA, ALGORITHM, DATA STRUCTURES, AUTOMATA, COMPILER, COMPUTER GRAPHICS, DISCRETE MATHEMATICS, COMPUTATIONAL MATHEMATICS ETC.

Area of Specialization: Optimization using Soft Computing techniques

Participation in Administrative activities:

Coordinator, BCA, Department of Computer Science & Applications, P. K. College, Contai

Member of Admission Committee of the P. K. College, Contai

Member of UG board of studies (Computer Science) of Vidyasagar University.

RESEARCH PROFILE

Area of Research Interest: Soft Computing (Fuzzy, Rough, Genetic Algorithm, Particle Swarm Optimization, Ant Colony Optimization) & Operations Research (Inventory problem, Travelling salesman problem, Vehicle Routing problem)

Research Experience	Research: 15 years
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Conference/Seminar/Workshop Organised:**Projects ongoing / completed:**

Title	Funding Agency	Year	Amount (Rs.)
Development of Soft Computing Techniques to Solve Real Life Inventory Control Problems: Special Attention to Indian Economy	University Grants Commission, India	2009-2010	71000.00
Development of Hybrid Soft Computing Methods and Their Applications in Optimization Problems: A real life approach	University Grants Commission, India	2015-2017	375000.00

Fellowship (s) / Award (s): Junior research fellowship through NET(CSIR), Fellowship received during M.Tech through GATE



Involvement in other research activities:

Supervisor: Guided three scholars as PhD supervisor, two awarded and another pursuing (Registered)

Adjudicator:

Reviewer:Appointed as a reviewer of many international reputed journal under ELSEVIER & Springer group, such as

- International Journal of Systems Science, U.K
- Applied Mathematical Modelling, Elsevier group
- Information Science, Elsevier group
- Computer & Industrial Engineering, Elsevier group
- Computers and Mathematics with Applications, Elsevier
- Applied soft computing, Elsevier.
- Optimization and Engineering, Springer.

Involvement in Academic/ Professional Organizations:

Life member of OPERATIONAL RESEARCH SOCIETY OF INDIA (Membership No.- **0724/A/06/ML**)

Member of RUSA Committee of the P. K. College, Contai

Convener of the Science Forum, P. K. College, Contai

Editorial Board Member:

- Editorial board member of the journal “**Research & Reviews: Discrete Mathematical Structures**” (STM journals).
- Editorial board member of the journal “**Recent Trends in programming Languages**” (STM journals).
- Editorial board member of the journal “**Software Engineering Tools & Technology Trends**” (STM journals).
- Editorial board member of the journal “**Journal of Information Technology and Sciences**” (MAT journals).
- Editorial board member of the journal “**Journal of Image Processing and Artificial Intelligence**” (MAT journals).
- Editorial board member of the journal “**International Journal of Image Science and Pattern Recognition**” (MAT journal).
- Editorial board member of the journal “**International Journal of Data Mining and Systems**” (MAT journal).
- Editorial board member of the journal “**International Journal of Information Technology Implementation**” (MAT journal).

Publications:

1. “A Rough Multi-Objective Genetic Algorithm for uncertain Constrained Multi-Objective Solid Travelling Salesman Problem”, Samir Maity, **Arindam Roy**, ManoranjanMaiti, Granular Computing, Article in press.
2. “Rough Genetic Algorithm for Constrained solid TSP with Interval Valued Costs and Times”, Samir Maity, **Arindam Roy**, ManoranjanMaiti, Journal of Fuzzy Information and Engineering (**Elsevier**), Article in press.
3. “An Intelligent Hybrid Algorithm for 4-dimensional TSP”, Samir Maity, **Arindam Roy**, ManoranjanMaiti, Journal of Industrial Information Integration (**Elsevier**), 5, 2017, 39-50.
4. “An imprecise Multi-Objective Genetic Algorithm for uncertain Constrained Multi-Objective Solid Travelling Salesman Problem”, Samir Maity, **Arindam Roy**, ManoranjanMaiti, Expert Systems with Applications (**Elsevier**), 46, 2016, 196-223.
5. “A Modified Genetic Algorithm for solving Uncertain Constrained Solid Travelling Salesman



- Problems”, Samir Maity, **Arindam Roy**, ManoranjanMaiti, Computers and IndustrialEngineering (**Elsevier**), 83, 2015, 273-296.
6. “A multi-warehouse partial backlogging inventory model for deteriorating items under inflation when a delay in payment is permissible”, Debasis Das, **Arindam Roy**, SamarjitKar, Annals of Operations Research (**Springer**), 220, 2014,1-32.
 7. “Two ware-house production inventory model for a deteriorating item with time-varying demand and shortages: a genetic algorithm with varying population size approach”, Debasis Das, Mohuya B. Kar, **Arindam Roy**, ManoranjanMaiti, Optimization and Engineering (**Springer**), 15, 2014,889-907.
 8. “A volume flexible economic production lot-sizing problem with imperfect quality and random machine failure in fuzzy-stochastic environment”, Debasis Das, **Arindam Roy**, Samarjit Kar, Computers & Mathematics with Applications (**Elsevier**), 61(9), 2011, 2388-2400.
 9. “A Volume flexible production-policy for randomly deteriorating items with trended demand and shortages”, **Arindam Roy**, Samarjit Kar, ManoranjanMaiti, International Journal of production Economics (**Elsevier**),128(1), 2010,188-199.
 10. “Improving production policy for a deteriorating item under permissible delay in payments with stock-dependent demand rate”, Debasis Das, **Arindam Roy**, SamarjitKar, Computers & Mathematics with Applications (**Elsevier**), 60, 2010,1973-1985.
 11. “Inventory models for breakable items with stock dependent demand and imprecise constraints”, AnirbanSaha, **Arindam Roy**, Samarjit Kar, ManoranjanMaiti, Mathematical and Computer Modelling (**Elsevier**), 52, 2010,1771-1782.
 12. “Two warehouse production model for deteriorating inventory item with stock dependent demand under inflation over random planning horizon”, Debasis Das, Mohuya B. Kar, **Arindam Roy**, ManoranjanMaiti, Central European journal of Operations Research (**Springer**), 2010, DOI 10.1007/s10100-010-0165-4.
 13. “A production inventory model with stock dependent demand incorporating learning and inflationary effect in a random planning horizon: A fuzzy genetic algorithm with varying population size approach”, **Arindam Roy**, Sova Pal, Manas Kumar Maiti, Computers and Industrial Engineering (**Elsevier**), 57, 2009,1324-1335.
 14. “A production-inventory model with remanufacturing for defective and usable items in Fuzzy-environment”, **Arindam Roy**, KalipadaMaity, SamarjitKar, ManoranjanMaiti, Computers and Industrial Engineering, (**Elsevier**), 56, 2009, 87-96.
 15. “An Inventory model for a deteriorating item with displayed stock dependent demand under fuzzy-inflation and time discounting over a random time horizon”, **Arindam Roy**, Manas Kumar Maiti, SamarjitKar, ManoranjanMaiti, Applied Mathematical Modelling (**Elsevier**), 33, 2009,744-759.
 16. “A deteriorating multi-item inventory model with fuzzy costs and resources based on two different defuzzification techniques”, **Arindam Roy**, SamarjitKar, ManoranjanMaiti, Applied Mathematical Modelling, (**Elsevier**), 32, 2008,208-223.
 17. “Two storage inventory model with fuzzy deterioration over a random planning horizon”, **Arindam Roy**, Manas Kumar Maiti, SamarjitKar, ManoranjanMaiti, Mathematical and Computer Modelling, (**Elsevier**),46, 2007,1419-1433.
 18. “Multi-item two storage inventory models for breakable items with fuzzy cost and resources based on different defuzzification techniques”, AnirbanSaha, **Arindam Roy**, SamarjitKar, ManoranjanMaiti, OPSEARCH (**SCOPUS** indexed),49(2), 2012,169-190.
 19. “Optimal payment time for a retailer under permitted delay of payment by the wholesaler with dynamic demand and hybrid number cost parameters”, Debasis Das, **Arindam Roy**, SamarjitKar,



- OPSEARCH (SCOPUS indexed), 48(3), 2011, 171-196.
20. "A multi-item inventory model for two-stage production system with imperfect processes using Differential evolution and Credibility measure", Debasis Das, **Arindam Roy**, SamarjitKar, International Journal of Operations Research, 2, 2012,87-99.
 21. "A production inventory model for a deteriorating item incorporating learning effect using Genetic Algorithm", Debasis Das, **Arindam Roy**, SamarjitKar, Advances in Operations Research (**Hindawi** Publishing Corporation),2010,doi:10.1155/2010/146042.
 22. "Volume Flexible Inventory Control System with Imperfect Quality and Machine Reliability in Stochastic and Fuzzy-Stochastic Environments", **Arindam Roy**, Samarjit Kar, ManoranjanMaiti,Tamsui Oxford Journal of Management Science, 23(1), 2007,17-36.
 23. "Coordinated Sale of Differential units with promotional cost and units' price through different shops in Fuzzy Environment", **Arindam Roy**, SamarjitKar, ManoranjanMaiti, Advanced Modeling and Optimization, Romania,7, 2005,39-56.
 24. "A Production Inventory Model in a Random Planning Horizon Incorporating Learning Effects on Inventory Costs Under Inflation and Time Value of Money via Genetic Algorithm",**Arindam Roy**, Manas Kumar Maiti, Journal of Artificial Intelligence Research & Advances (National Journal),1, 2014,1-12.

Books :

Edited Books:

Chapters in Books :

Sl. No.	Title with page no.	Book title, editor & publisher	ISSN/ISBN No.	Whether peer reviewed.	No. of Co-author	Whether you are the main author
1	Constrained Solid Travelling Salesman Problem Solving by Rough GA Under Bi-Fuzzy Coefficients, 425-442	Advances in Intelligent Systems and Computing 404, S. das, T. Pal, S. Kar, S.C. Satapathy, J. K. Mandal, Springer	ISSN 2194-5357 ISSN 2194-5365 (electronic)	Yes	2	No
2	An Improved Genetic Algorithm and Its Application in Constrained Solid TSP in Uncertain Environments, 177-200.	<i>Facets of Uncertainties and Applications</i> , Springer Proceedings in Mathematics & Statistics 125, M.K. Chakraborty et al. (eds.), Springer	DOI 10.1007/978-81-322-2301-6_14	Yes	2	No

Conf. Proceedings:

Sl. No.	Title with page no.	Details of Conference Publication	ISSN/ ISBN No.	No. of Co-author	Whether you are the main



					author
1	A Hybrid Heuristic for restricted 4- Dimensional TSP (r-4DTSP)	published in Springer volume		2	Yes
2	Constrained Solid Travelling Salesman Problem Using Adaptive Genetic Algorithm in Uncertain Environment	Published in IEEE Xplore		2	Yes
3	A production inventory model in a random planning horizon incorporating learning effects on inventory costs under inflation & time value of money via Genetic Algorithm,43-44	Published in Conference Proceeding“Globalization: Opportunities and Challenges“		3	Yes
4	Volume Flexible Inventory Control System with Stock-dependent Demand, Imperfect Quality and Machine Reliability, 316-321	Published in Conference Proceeding “ICORD-V”		2	Yes
5	Application of Genetic Algorithm in Optimization Problems, 305-312	Published in Conference Proceeding “RIT-2003”		1	Yes
Any other relevant information	:	<p>Visiting Fellow, Tsinghua University, Beijing, China, April-May, 2017.</p> <p>Invited speaker in a seminar on Soft Computing Approach in Belda College, PaschimMedinipur, WB, held on 28.05.2014, organized by Dept. of Computer Science & BCA.</p> <p>Guest faculty of M.Sc& MCA in Vidyasagar University.</p> <p>Paper setter and Head Examiner/Examiner in University.</p> <p>Personal webpage: www.arcontai.tk</p>			

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