CURRICULUM VITAE

Dr. Saurabh Srivastava
Assistant Professor (Senior Grade)
Department of Mathematics,
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Areas of Research Interest: Nonlinear Programming, Interval Optimization, Numerical Optimization Techniques and Sustainable Inventory Control.

Professional Background:

Period	Position	Organization
01.03.2021-date	Assistant Professor (Senior Grade)	Jaypee University of Information Technology, Waknaghat, Solan
25.11.2017-28.02.2021	Assistant Professor (Grade II)	Jaypee University of Information Technology, Waknaghat, Solan
13.03.2010-23.11.2017	Assistant Professor	Hindustan College of Science & Technology, Farah, Mathura
05.08.2008-30.01.2010	Assistant Professor	Rakshpal Bahadur College of Engineering & Technology, Bareilly
01.08.2007-15.01.2008	Senior Lecturer	Ajay Kumar Garg Engineering College, Ghaziabad
31.07.2006-15.06.2007, 12.11.2005-03.06.2006, 23.11.2004-15.09.2005	Lecturer	Institute of Engineering and Technology, MJP Rohilkhand University, Bareilly
21.10.2003-28.02.2004, 02.09.2002-28.02.2003, 03.10.2001-28.02.2002	Lecturer	Bareilly College, Bareilly

Educational Details:

Degree/ Certificate	University/Board	Subject(s)	Year	% Marks
Ph.D.	M.J.P. Rohilkhand University, Bareilly	Mathematics (Nonlinear Optimization)	2005	NA
M.Sc.	M.J.P. Rohilkhand University, Bareilly	Mathematics	1999	70.75
B.Sc.	M.J.P. Rohilkhand University, Bareilly	Mathematics, Physics, Chemistry	1997	76.67
Intermediate	U.P.Board, Allahabad	Mathematics, Physics, Chemistry, Hindi, English	1994	65.20
High School	U.P.Board, Allahabad	Mathematics, Science, Biology, Social Sciences, Hindi, English	1992	63.22

Memberships:

- Ramanujan Mathematical Society, Tiruchirapalli.
- Indian Mathematical Society, New Delhi.
- Scientific and Technical Research Association (STRA).
- Indian Science Congress Association, Kolkata.

Participation in Seminars, Workshops, FDP, STC:

- FDP on entrepreneurship of two weeks from 31.07.2017 to 13.08.2017 at HCST, Farah, Mathura, conducted by Institute of Entrepreneur Development, U.P. Government.
- FDP on Recent Trends on Machine Learning for Signal Processing of one week from 20.05.2019 to 25.05.2019 at JUIT, Waknaghat, conducted by Department of Electronics and Communication, JUIT, Waknaghat.
- One-Week Online Faculty Development Programme (FDP) on "Applicability of Mathematical Sciences in Emerging World",28th July 2020 to 02nd August, 2020, organized by Department of Applied Science & Humanities, Faculty of Science, Invertis University, Bareilly (U.P.)
- Six days e-Faculty Development Program on Applied Mathematics and Related Fields, 24-29, August,2020, organized by Department of Mathematics, Institute of Applied Sciences and Humanities, GLA University, Mathura, U.P., India.
- Five days E-workshop on Stochastic Modelling, Optimization and Soft Computing, August 10-14, 2020, organized by Department of Mathematics & Statistics, School of Basic Sciences, Manipal University, Jaipur, India.
- Digital international conference on Inventory Modeling,22-23,08,2020, organized by Department of Mathematics, Gujarat University, Ahmadabad, India.
- STC on Artificial Neural Networks and Fuzzy Logic through ICT of one week from 23.07.2018 to 27.07.2018 at JUIT, Waknaghat conducted by NITTR, Chandigarh.

Undergraduates Projects and Thesis Supervised:

▪ Depression Assessment and Adolescence Stress Survey, 2019, Dr. Udaybanu, M. and Dr. Saurabh Srivastava.

▪ Gene expression analysis for brain derived neurotrophic factors (BDNF) and their role in Alzheimer's disease, 2020, Dr. Tiratha Raj singh and Dr. Saurabh Srivastava.

Ph.D. Supervised/Ongoing:

Topic	Scholar Name	Status	Registration Date
Interval Optimization(Broad area)	Mrs. Shaveta Kumari	Ongoing	01.07.2018

Conferences/Workshops Organized:

▪ Indo-Japan Seminar on "Nano Materials for technology Developments'' (IJSNTD-2010) at Hindustan College of Science & Technology, Farah, Mathura, U.P., India, Oct 28,2010.

▪ National Conference/ Workshop on Synthesis, Characterization and Application of Advanced Nanomaterials,NCSCAAN-2014,Jan.17-19,2014 at Hindustan College of Science & Technology, Farah, Mathura, U.P., India

Papers Published in Journals:

1. A Study of Trust Region Algorithm For Nonsmooth Composite Functions : pp 91-96 ,Vol.-XXXIV M No.1, 91 (2008), Acta Ciencia Indica, Saurabh Srivastava.
2. A Study on the Rate of Convergence of Descent Methods:Vol.7 No.1(2007),195-200, Varahmihir Journal of Mathematical Sciences, Saurabh Srivastava.
3. A Globally Convergent Algorithm for Constrained Optimization Using Quadratic Optimization, Acta Ciencia Indica, vol. 41 issue no.3,Nov, 2015, Saurabh Srivastava.
4. Determination of the Search Direction in Quadratic Constrained Optimization, European Journal of Advances in Engineering and Technology ,www.ejaet.com, 2(8): 77-81,2015, Srivastava Saurabh
5. A Modification of the Mangasarian-Fromovitz Constraint Qualification for Nonsmooth B-Differentiable Functions, International Journal of Trend in Research and Development(ISSN:2394-9333),vol 3,issue 4, July-August 2016, Saurabh Srivastava.
6. Deterministic Inventory Model for Items with Linear Demand, Variable Deterioration and Partial Backlogging, International Journal of Inventory Research, Vol. 4, No. 4,10.1504/IJIR.2017.090378, 2017, Saurabh Srivastava, Harendra Singh.
7. On Parametric Divergence Measure of Neutrosophic Sets with its Application in Decision-making Models, Neutrosophic Sets and Systems,29,101-120,2019, Abhishek Guleria, Saurabh Srivastava, Rakesh Kumar Bajaj. **[WOS, Scopus]**
8. Network Modelling and Computation of Quickest Path for Service Level Agreements Using Bi-Objective Optimization, International Journal of Distribution Sensor Networks, 15(10)

,2019,Ashutosh Sharma, Rajiv Kumar, Manar Wasif Abu Talib, Saurabh Srivastava and Razi Iqbal.**[SCIE, Scopus]**

9. On Optimality Condition for Interval Optimization Problems using Generalized Hukuhara Difference and Constrained Interval Arithmetic, International Journal of Mathematics in Operational Research, Shaveta Kumari, Saurabh Srivastava,Vol. 19, No. 2, 204-219, 2021,10.1504/IJMOR.2020.10030711**[Scopus].**

10. Optimal Inventory Management System for Deteriorating Items with Linear Demand, Shortages and Partial Backlogging in a Triangular Fuzzy Setup, International Journal of Services and   Operations Management, Rakesh Kumar Bajaj, Saurabh Srivastava, Vol. 39, No. 1, 98-120,2021,10.1504/IJSOM.2020.10023941[**Scopus].**

11. Application of Stochastic Programming Technique to Solve Interval Quadratic Programming Problem, International Journal of Applied and Computational Mathematics, ShavetaKumari, Saurabh Srivastava, Vol-7, Issue-1,1-16, 2021, 10.1007/s40819-020-00947-7 [Scopus].

12. An inventory model for perishables with fixed storage life and diminishing ability to buy in their life expectancy, International Journal of Operational Research, Saurabh Srivastava, 10.1504/IJOR.2021.10040828, 2022 **[Scopus]**

Papers Published in Conference Proceedings:

1. Some Constraint Qualifications for the Solutions of Constrained Optimization Problems: pp 15-21, Vol.-19, 2003. Proceedings of the Mathematical Society, (BHU), Saurabh Srivastava, A.Nadeem.

2. A Sequential Algorithm to Solve gH-Differentiable Interval Optimization Problems. Proceedings of the International Conference on Contemporary Computing (IC3-2021) [13th : Noida, India : 04-06.08.2021], Shaveta Kumari, Saurabh Srivastava (2021).

Papers Presented in Conferences:

1. An algorithm for unconstrained nonsmooth optimization problem :A Trust Region Approach, Eleventh International Conference-SCRA-2004 Forum of Interdisciplinary Mathematics(FIM),Dec-27,2004, Saurabh Srivastava.

2. A Mathematical Model for job shop scheduling problem, 64th Annual Conference of Indian Mathematical Society (IMS),Gurukul Kangri Vishwavidyalaya,Hardwar,Dec.19-22,1998, Saurabh Srivastava.

3. Distributed Service Networks: Separate Dispatching Policies, 64th Annual Conference of Indian Mathematical Society (IMS),Gurukul Kangri Vishwavidyalaya,Hardwar,Dec.19-22,1998, Saurabh Srivastava.

4. Some Constraint Qualifications for the solutions of Constrained Optimization problem, XIX Annual Conference of the Mathematical Society,(B.H.U.).Varanasi,Dec.26-27,2003, Saurabh Srivastava.

5. Algorithms for equality constrained quadratic programs, XIX Annual Conference of the Mathematical Society, (B.H.U.). Varanasi, Dec.26-27,2003, Saurabh Srivastava.

6. Designing of Algorithms for nonlinear constrained optimization problems, 69th Annual Conference of Indian Mathematical Society (IMS), Lucknow University, Lucknow,Dec.26-29,2003, Saurabh Srivastava.
7. Mathematical Characterization of the solution of constrained optimization problems, 91st Session of Indian Science Congress Association(ISCA), Punjab University, Chandigarh, Jan.3-4, 2004, Saurabh Srivastava.
8. An algorithm for nonsmooth convex optimization: A Descent Method Approach, 92nd Session of Indian Science Congress Association (ISCA), Ahemdabad, Jan.3-7, 2005, Saurabh Srivastava.
9. A Convergent algorithm for constrained minimization problems, 92nd Session of Indian Science Congress Association (ISCA), Ahmedabad, Jan.3-7, 2005, Saurabh Srivastava.
10. Prediction of feasibility for nonlinear inequality constraints, XX Annual Conference of the Mathematical Society,(B.H.U.).Varanasi,Jan.10-11,2005, Saurabh Srivastava.
11. An Objective Penalty Functions Algorithm for Multi-objective Programming Problem, MCM, 2013, IBS, Khandari, Agra,May24-26,2013,Saurabh Srivastava.
12. The optimal EOQ policies under permissible delay in payments depending on the ordering quantity,CORTMAS-2013,DDU Gorakhpur University, Gorakhpur, July 27-28,2013, Saurabh Srivastava.
13. On Trust Region Method for Nonlinear and Nonsmooth Optimization, Workshop on ''Applications of Mathematics in Modern Era.'', Dec,21-22,2016, IBS, Khandari, Agra, Saurabh Srivastava.
14. Application of Interval Analysis in Multi-objective Optimization presented in 3rd Himachal Pradesh Science Congress, IIT Mandi, 22nd–23rd October, 2018, Shaveta Kumari, Saurabh Srivastava.

Book Chapters Published:
*   A Newton Based Optimization Method For Interval Multi-objective Optimization Problems (IMOP) Using GH-Calculus, Advances & Applications in Mathematical Sciences, ISBN 978-93-90146-22-2, Shaveta Kumari, Saurabh Srivastava, 30-39, 2021.
*   Solving Multi-objective Linear Fractional Programming Problem Utilizing(α, β)-cut in Triangular Intuitionistic Fuzzy Setup, Real Life Applications of Multiple Criteria Decision-Making Techniques in Fuzzy Domain, Springer, 2022.

Invited Talks/Lectures Delivered:

*   On Integral calculus in In-Service Teacher Training Programme, 08.07.2019-13.07.2019, State Council of Educational Research & Training, Solan, Himachal Pradesh, India.
*   On Point Set Topology and Analytic Functions in complex Analysis, 08.06.2020, Department of Mathematics, Hindustan College of Science and Technology. Farah, Mathura, U.P., India.