

Dr. Jitesh Pati Tripathi

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Assistant Professor, Department of Mathematics

R. N. College, Hajipur (A Constituent P.G. unit of B. R. A. Bihar University, Muzaffarpur)

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Academic Profile

- Currently serving as an Assistant Professor, Department of Mathematics, R. N. College Hajipur, (A Constituent P.G. Unit of B. R. A. Bihar University, Muzaffarpur), (16th December, 2017- Continue).
- Served as an Assistant Professor, Department of Applied Sciences and Humanities, S R Institute of Technology & Management, Lucknow, U.P. (1st August, 2013 – 15th December, 2017).
- Served as a Lecturer, Department of Humanities and Applied Sciences, Sagar Institute of Technology and Management, Barabanki, U.P. (July 2005-June 2008).

Academic Qualifications

- Ph.D. in “Analysis and Management of Traffic System Using Fuzzy Approach” from the Department of Mathematics and Statistics, D.D.U. Gorakhpur University, Gorakhpur in 2013.
- University topper of Pre-Ph.D. Course Work (during Ph.D.) secured **88%** marks held at D. D. U. Gorakhpur University, Gorakhpur.
- Master of Engineering in Computer Science & Engineering from Thapar University, Patiala, Punjab in 2010 with CGPA - **8.8 in 10**-pint scale.
- M.Sc. (Mathematics) from D.D.U. Gorakhpur University, Gorakhpur in 2005 with **73%** marks.
- B.Sc. from D.D.U. Gorakhpur University, Gorakhpur in 2003 with **63%** marks.
- Intermediate (10+2) from U.P. Board in 2000 with **62%** marks.
- High School (10th) from U.P. Board in 1998 with **63%** marks.

Academic Achievements

- Completed One week Faculty Development Programme (FDP) on “Tools and Techniques in Translational Research” organized by Faculty of Science, Invertis University, Bareilly
(From 18/07/2022 to 23/07/2022)
- Completed One-week Short Term Course on “Research Methodology and Qualitative Techniques” from October 13-19, 2022” organised by the Department of mathematics, Harcourt Butler Technical University, Kanpur (U.P.).
(From 13/10/2022 to 19/10/2022)

- Completed successfully the 7th Refresher Course in Mathematical Sciences from U.G.C-HRDC, D. D. U. Gorakhpur University, Gorakhpur (U.P.) with Grade – A⁺ (From 29/12/2020 to 11/01/2021)
- Completed One week Faculty Development Programme (FDP) on “Applicability of Mathematical Sciences in Emerging World” organized by Department of Applied Science and Humanities, Faculty of Science, Invertis University, Bareilly in Association with “The National Academy of Science, International Academy of Physical Sciences and Mathematical Sciences Institute” (From 28/07/2020 to 02/08/2020)
- Completed Ten Days Faculty Development Programme (FDP) on “R Programming” organized by IQAC, A. N. College, Patna in association with IIT-Bombay through Spoken Tutorial, Remote Learning (An Initiative of National Mission on Education through ICT, MHRD, Govt. of India). (From 08/06/2020 to 17/06/2020)
- Completed Faculty Development Programme (FDP) on “Outcome Based Education and Accreditation” organized by IILM College of Engineering & Technology, Greater Noida. (From 25/05/2020 to 29/05/2020)
- Completed Twelve days Faculty Development Programme (FDP) on “SCILAB (Scientific Laboratories)” organized by IQAC, A. N. College, Patna in association with IIT-Bombay through Spoken Tutorial, Remote Learning (An Initiative of National Mission on Education through ICT, MHRD, Govt. of India). (From 22/05/2020 to 02/06/2020)
- Completed One Week Faculty Development Programme (FDP) on “Application on Different Tools and Techniques for Academic and Research Writing & Reporting” organized by R. R. Institute of Modern Technology, Lucknow. (From 18/05/2020 to 23/05/2020)
- Successfully completed the self-learning Online Course on “Understanding Open Educational Resources” organized by the Commonwealth of Learning, Canada on May 23, 2020.
- Completed one week Faculty Development Programme (FDP) on LaTeX & Xfig organized by A. N. College, Patna association with IIT-Bombay through Spoken Tutorial (From 11/05/2020 to 17/05/2020)
- Completed One week Faculty Development Programme (FDP) on " Smart Infrastructures and Secure Computing Technologies (SISCT-2020) " organized by Computer Science & Engineering Department, Rajkiya Engineering College, Sonbhadra (Sponsored by AKTU Lucknow, under TEQIP III). (From 10/02/2020 to 14/02/2020)

- Completed successfully the 79th Orientation Programme from Academic Staff College, Patna University, Patna with Grade – A (From 17/07/2018 to 13/08/2018)
- GATE-2008, All India Rank -168, Percentile – 93.52
- IIT Dhanbad (JRF) – July 2007
- NET (CSIR) – June 2006
- GATE-2006, All India Rank -270

Professional Membership

- Life Member of **Indian Mathematical Society (L / 2018 / 75)**
- Life Member of **Indian Science Congress (L 37251)**
- Life Member of **Bharata Ganita Parisad**
- Life Member of **International Academy of Physical Sciences (N 19354)**
- Executive Member of **Bihar Mathematical Society**
- Sectional Member of **Indian Science Congress**

Research Publications (In reverse order)

- U. P. Singh, **J. P. Tripathi** “A Theoretical Investigation of Thermoelastohydrostatic Properties of Thrust Bearings” Journal of Tribology. (**SCI Listed Journal**) (Communicated)
- Dharmendra Kumar, **J. P. Tripathi** “Traffic Light Controller for Smart Cities using Fuzzy Logic” Journal of Ramanujan Society of Mathematics and Mathematical Sciences, Vol. 19 (2), 2023, pp. 31-43. (**SCOPUS Indexed**)
- Yashwant Kumar Singh, Satya Ranjan Pradhani, **J. P. Tripathi** & Umesh Kumar Srivastava “Analytical Study on Motion under a Constant Force in Relativistic Mechanics” International Journal of Recent Development in Engineering and Technology, Vol.12(4),2023, pp. 1-3. (**Refereed Journal**)
- Yashwant Kumar Singh, **J. P. Tripathi**, A. K. Mishra & U. K. Srivastava “A New Characterization of Homogeneous Relativistic Space” International Journal of Recent Development in Engineering and Technology, Vol.12(3),2023, pp. 11-15. (**Refereed Journal**)
- **J. P. Tripathi**, Dharmendra Kumar, U. P. Singh “A Review on Different Fuzzy Models to Evaluate Vehicular Traffic System” SAMRIDDHI: A Journal of Physical Sciences, Engineering and Technology, 15(1), 2023, pp. 49-54. (**UGC- CARE Listed Journal**)

- U P Singh, **J P Tripathi**, S C Rao “Approximation of Linear Initial Value Problems using Bernoulli Polynomial and Operational Matrix” GANITA: A Journal of Bharti Ganita Parishad, Vol.72(2), 2022, pp. 65-74. **(UGC- CARE Listed Journal)**
- Neha Mishra, **J. P. Tripathi** “A Compendium over Nature-Inspired Metaheuristic Algorithms for Prioritization of Requirements” Journal of International Academy of Physical Sciences, Vol. 26 No.3(2022) pp. 321- 337. **(Refereed Journal)**
- A. Khan, P. N. Pathak, S. Sharma, **Jitesh P. Tripathi**, R. Bhardwaj, and V. Kumar “Contractions with Comparison Function in the Extended Cone 2- Metric Space” ECS Transactions, Vol. 107 (1), pp. 20321-20328 (2022), 10.1149/10701.20321ecst ©The Electrochemical Society **(SCOPUS Indexed)**
- Abid Khan, Pratap Narayan Pathak, Santosh Sharama, Giriraj Verma, Varun Kumar, **Jitesh P. Tripathi** “Fixed point theorems using comparison functions view to dislocated quasi-metric spaces” ECS Transactions, Vol. 107 (1), pp. 11969-11980 (2022) 10.1149/10701.11969ecst ©The Electrochemical Society. **(SCOPUS Indexed)**
- Vinay Yadav, **Dr. Jitesh P. Tripathi**, Dr.Bhawesh Kumar Thakur “Efficient Road Traffic Management using Fuzzy and Genetic Approaches” Design Engineering (Toronto), Vol. 2021, Issue 6, pp.2381 - 2393. **(SCIE Listed Journal)**
- **J. P. Tripathi**, B. K. Singh & U. P. Singh “Homotopy Analysis of Circular Plates Squeeze Film Bearings Lubricated with Couple Stress Fluids: Piezo-Viscous Model” Science and Technology Journal Vol. 8, Issue-2, July 2020, pp. 105-112. **(UGC- Listed Journal)**
- Vinay Yadav and **Dr. Jitesh Pati Tripathi** “Road Traffic Management Systems: A Categorization, Assessment, Challenges and Potential Perspectives” International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) Volume 10, Issue 2, October (2020) pp. 202-207**(Refereed Journal)**
- **Jitesh P. Tripathi**, Neha Mishra “Model for Modern Traffic System Using Remote Sensing and GIS Tools” Journal of International Academy of Physical Sciences, Vol. 22 No.3(2018) pp. 195- 206. **(Refereed Journal)**
- Prashant Bajpai and **Dr. J. P. Tripathi** “Software Defect Prediction Using Data Mining Classification Approach” International Journal of Research and Development in Applied Science and Engineering (IJRDASE), Volume 13, Issue 1, March 2017 (Available online at: www.ijrdase.com).**(Refereed Journal)**
- N. Mishra, S. Siddiqui and **Jitesh P. Tripathi** “A Compendium Over Cloud Computing Cryptographic Algorithms and Security Issues” BIJIT - BVICAM’s International Journal of Information Technology, BIJIT – 2015; January - June, 2015; Vol. 7 No. 1, page 810-814. **Springer SCI Journal**

- H. S. Shukla, **Jitesh Pati Tripathi** “Automatic Traffic Light Control for Emergency Vehicle Using Fuzzy Logic” Journal of International Academy of Physical Sciences, Vol. 16 No.1(2012) pp. 59-67. **(UGC-Listed Journal)**
- **Jitesh P. Tripathi**, H. S. Shukla “Management of a Road Traffic Junction Using Fuzzy Lights Controller” Journal of Rajasthan Academy of Physical Sciences (JRAOPS), Vol. 11 No.3 (2012), pp. 209-222. **(ESCI & UGC-Listed Journal)**
- **Jitesh P. Tripathi**, H. S. Shukla, U. P. Singh “Management and Evaluation of Road Traffic System Using Fuzzy Logic” International Journal of Engineering and Management Research, Vol. 2, Issue-1, Jan 2012, pp.9-13. **(Refereed Journal)**
- H. S. Shukla, **Jitesh Pati Tripathi** “Traffic Management System Using Fuzzy Logic” Journal of International Academy of Physical Sciences, Vol. 15 No.2 (2011) pp. 189-196. **(UGC-Listed Journal)**
- H. S. Shukla, **Jitesh Pati Tripathi**, “Clustering Algorithm for Detection of Hot-Spots” J. Nat. Acad. Math., Vol. 24(2010), pp. 69-76. **(Refereed Journal)**
- **Jitesh P. Tripathi**, D. Garg “Algorithm for Detection of Hot Spots of Traffic through Analysis of GPS Data” BEACON (Annual Journal of IEEE), January 2010, Volume 29, No.1, PP. 09-15. **IEEE SCI Journal.**

Patent (In reverse order)

- **Title:** ARTIFICIAL INTELLIGENCE RULE BASED VISUAL CRYPTO-STEAGANOGRAPHY METHOD FOR DATA COMMUNICATION USING BLOCK CHAIN TECHNOLOGY
Type: Canadian Copyright
Registration Number: 1187854
Registered: 2021-11-03
Date of issuance: 4th January 2022
Category of Work: Literary
- **Title:** A System Based on Deep Learning for Analyzing Delayed Enhancement Magnetic Resonance Imaging to Identify Covid 19 And Method Thereof
Application ID: 202211000064
Invention Field: PHYSICS
Date of Application: 2022-01-01
Publication Number: 01/2022
Type: Published

Seminars/ Conferences/ FDP (In reverse order)

Conference/ FDP Conducted:-

- Organized National Seminar on "Recent Advances in Mathematical Sciences (NSRAMS-2023)" held at R. N. College, Hajipur on 16-17 May 2023. **(As a Convener)**
- Organized a seminar on "Scientific Temperament: Key to a Successful Life" held at R. N. College, Hajipur on 26th April 2023. **(As a Convener)**
- Organized a seminar on "Career Opportunities in BFSI & Logistics Sector" held at R. N. College, Hajipur on 17th April 2023. **(As a Convener)**
- Organized a seminar on the occasion of National Mathematics Day entitled "From Kumbakonam to Cambridge: Some Mathematical Puzzles" held at R. N. College, Hajipur on 22nd December 2022. **(As a Convener)**
- Organized a workshop on "Tools and Techniques for Modern Research in Science" held at R. N. College, Hajipur on 9th July 2022. **(As an Organizing Secretary)**
- Organized One week Faculty Development Programme (FDP) on "Applicability of Mathematical Sciences in Emerging World" in association with The National Academy of Science, International Academy of Physical Sciences & Mathematical Science Institute held at Invertis University, Bareilly from 28th July 2020 to 02nd August 2020. **(As an Organizing Secretary)**
- Organized an online Quiz competition for students and e-certificates were issued to the participants.
- Organized National Conference on "Recent Advances in Physical Sciences (NCRAPS-19)" held at R. N. College, Hajipur on 12-13 October 2019. **(As an Organizing Secretary)**
- Member of Event Management Committee in IEEE International Advance Computing Conference (IACC' 10) held at Thapar University, Patiala on 19-20 February 2010.
- Member of Event Management Committee in IEEE International Advance Computing Conference (IACC' 09) held at Thapar University, Patiala on 6-7 March 2009.

Invited Talk / Session Chair:-

Invited talk on "Road Traffic Management Systems: A Categorization, Assessment, Challenges and Potential Perspectives" in the International Conference on Recent Advances in Science and Engineering (RASE-2021) held at Rajkiya Engineering College, Sonbhadra, U. P., India on 27th February 2021.

Chaired a session in the International Conference on Recent Advances in Science and Engineering (RASE-2021) held at Rajkiya Engineering College, Sonbhadra, U. P., India on 26th February 2021.

Paper presented:-

- 107th Indian Science Congress on " Science and Technology: Rural Development" organized by University of Agriculture Sciences, Bangalore on 3-7 January, 2020.
(Title of the paper presented: - Technique for detection of Hot-spot of Road Traffic System)
- 25th International Conference of International Academy of Physical Sciences (CONIAPS XXV) on "Physical and Biological Sciences at cross-roads: Interdisciplinary Explorations and Exciting Challenges" organized by Guru Jambheshwar University of Science & Technology on December 29-31, 2019.
(Title of the paper presented: - Algorithm for Fuzzy Logic Control method of Road Traffic Signal)
- 3rd International Conference on "Challenges & Opportunities for Technological Innovation in India (COTII - 2019)" organized by Ambalika Institute of Management & Technology, Lucknow, U.P. on February 22-23, 2019.
(Title of the paper presented: - Efficient Clustering Technique for Runtime data)
- National Conference on "Recent Trends in Mathematics and Applications (NCRTMA -2019)" organized by Faculty of Mathematical and Statistical Science, Shri Ramswaroop Memorial University, Lucknow, U.P. on February 21 – 22, 2019.
(Title of the paper presented: - Traffic Management system using sparse Matrix)
- National Conference on "Emerging Trends in Engineering Technology and Management (NCETETM-2019) " jointly organized by Amity School of Engineering & Technology and Amity Institute of Information Technology, Amity University, Chhattisgarh, Raipur on February 12-13, 2019.
(Title of the paper presented: - A hybrid approach to optimize the project scheduling in Software Engineering)
- 23rd International Conference of International Academy of Physical Sciences (CONIAPS XXIII) on "Advances in Physical Sciences to achieve sustainable development goals" Organized by Nepal Academy of Science and Technology (NAST), Kathmandu, Nepal on NOVEMBER 16-18, 2018.
(Title of the paper presented: - Road Traffic Management using Fuzzy Controllers)
- National Conference on "Challenges & Opportunities for Technological Innovation in India (COTII - 2016)" organized by Ambalika Institute of Management & Technology, Lucknow, U.P. on February 19 -20, 2016.
(Title of the paper presented: - Efficient Clustering Algorithm for Detection of Hot-Spots)
- National Conference on "Challenges & Opportunities for Technological Innovation in India (COTII - 2013)" organized by Ambalika Institute of Management & Technology, Lucknow, U.P. on February 16, 2013.

(Title of the paper presented: - Performance and Compression of Routing protocol in MANET)

- National conference on “Role of Mathematics and its applications in development of science and technology” organized by Govt. P. G. College, Lansdowne, Jaiharikhal, U.K. on March 21-22, 2013.

(Title of the paper presented: - Management and Evaluation of Road Traffic System Using Fuzzy Logic)

- National Conference on “Challenges & Opportunities for Technological Innovation in India (COTII - 2013)” organized by Ambalika Institute of Management & Technology, Lucknow, U.P. on February 16, 2013.

(Title of the paper presented: - Automatic Traffic Light Control for Emergency Vehicle Using Fuzzy Logic)

- Paper presented on the topic in the Conference on “Recent Trends in Pure and Applied Mathematics (CORTPAM-2011)” organized by D.D.U. Gorakhpur University, Gorakhpur, U.P. on June 24-25, 2011.

(Title of the paper presented: - Traffic Signal Control Using Fuzzy Logic)

- International Conference on “Mathematics of Date” organized by P. P. H. Allahabad, U.P. on December 31, 2010 – January 04, 2011.

(Title of the paper presented: - Traffic Management System Using Fuzzy Logic-I)

- Conference on “Recent Trends in Pure and Applied Mathematics (CORTPAM-2010)” organized by D.D.U. Gorakhpur University, Gorakhpur, U.P. on July 24-25, 2010.

(Title of the paper presented: - Traffic Management System Using Fuzzy Logic)

Conference/ Workshop Attended:-

- International Web-Conference on “ Complex Analysis & Differential Geometry: Revisiting” organized by Department of Mathematics, S.K.B. University in Association with IQAC, S.K.B. University, W.B on June 29-30, 2020.
- National webinar on “ Prospects and challenges for Future NAAC Accreditation in Colleges ” organized by IQAC, Government V.Y.T. P.G. Autonomous College, Durg (C.G.) held on June 14, 2020.
- Webinar on “ COVID-19 : Nature & Environment” organized by IQAC and Department of Botany, English & Political Science, R. N. College, Hajipur in collaboration with Shiksha Sanskriti Utthan Nyas, Bihar and IIPA, Bihar Regional Branch, Patna held on June 5, 2020.
- Webinar on “ Challenges of Higher Education in era of COVID-19 pandemic” organized by the department of Mathematics, Shia P.G. College, Lucknow on June 3, 2020.
- Webinar on “ कोरोना काल के बाद तकनीकी छात्रों के लिए बनते नए अवसर” organized by Dr. A. P. J. Abdul Kalam Technical University, Lucknow on 17th May 2020.

- Webinar on “The Effect of Lockdown on Global Climate 2020” organized by Rajkiya Engineering College, Kannauj on 16th May 2020.
- Webinar on “Outcome Based Education” organized by R. R. Institute of Modern Technology, Lucknow on 16th May 2020.
- 7th Bihar Science Conference 2018 “ An International Conference of Science & Technology” organized by College of Commerce, Arts & Science and BBrains Development Society, Patna, Bihar on December 04 – 06, 2018.
- 2nd International Conference on “Recent Advances in Science (ICRAS-2018)” held at Invertis University, Bareilly, U.P. on March 09-10, 2018.
- Workshop on “Cryptography & Its Applications” held at Institute of Technology & Management, Lucknow, U.P., sponsored by DRDO, INDIA on 24-25 March’ 2017.
- National Conference on “Challenges & Opportunities for Technological Innovation in India (COTII - 2015)” held at AIMT, Lucknow, U.P. on February 19 -20, 2015.
- 4th Annual Conference of The Tensor Society on “Application of Tensors and Differential Geometry in Engineering and Physical Sciences” held at SRMGPC, Lucknow on October 08-09, 2011.

Research

Research Area: - Fuzzy Clustering, Efficient Algorithms, Optimization, Operations Research.

Research Scholars: -

- **Mr. Mithilesh Kumar Mishra** on the Topic “SOME STUDY ON OPTIMIZATION OF TRANSPORTATION PROBLEMS USING FUZZY APPROACH” from B. R. A. Bihar university, Muzaffarpur. (Date of Registration – 2023 to Continue).
- **Mr. Amit Kumar Nandan** on the Topic “SOME STUDY ON ASSIGNMENT PROBLEMS USING FUZZY APPROACH” from B. R. A. Bihar university, Muzaffarpur. (Date of Registration – 2023 to Continue).
- **Mr. Dharmendra Kumar** on the Topic “FUZZY MODELS FOR EVALUATION AND MANAGEMENT OF VEHICULAR TRAFFIC SYSTEM” from B. R. A. Bihar university, Muzaffarpur. (Date of Registration – July 2021 to Continue).
- **Mr. Yashwant Kumar Singh** on the Topic “A STUDY ON HOMOGENEITY OF RELATIVISTICS SPACE” from B. R. A. Bihar university, Muzaffarpur. (Date of Registration – 10th September 2020 to Continue).

Interested Subjects

- **Mathematics:** Linear Algebra, OR, Numerical Analysis, Abstract Algebra, Differential Equation, Complex Analysis.
- **Computer Science:** DBMS, Algorithms, CBNST, Graph Theory.

Corporate responsibility (Posts/ Positions held in College/ University):

- Head, P.G. Department of Mathematics, R. N. College, Hajipur from 1st August 2020 to continue.
- Routine In-charge of college from 1st August 2020 to continue.
- Nodal officer of NAD
- Professor In-charge E-Library from 1st April 2019 to continue.
- Member of College Admission Committee.
- Member of Development Committee.
- Member of Sub-purchase Committee.
- **Secretary**, Bihar University Teachers' Association (BUTA Unit) at R. N. College, Hajipur from July 2019 to till date.
- **Secretary**, Bihar University Teachers' Association (BUTA) at B.R. A. Bihar University, Muzaffarpur from October 2021 to till date.
- Member of Constituted Committee of University for "Weekly Online Class report" to the Hon'ble Chancellor Secretariat (During COVID-19).
- Sectional Member of Mathematics & Statistics form India-East in 107th Indian Science Congress organized by University of Agriculture Sciences, Bangalore on 3-7 January, 2020.



(Dr. Jitesh Pati Tripathi)