

# Kinsuk Giri



As on April 3, 2025

## **Current Position and Address**

Assistant Professor, Dept. of CSE National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata Block - FC, Sector - III, Salt Lake City, Kolkata - 700106, India.

#### **Parental Address**

Mouni, Vill + PO + PS : Mohanpur Dist: Paschim Medinipur West Bengal, PIN - 721436, India.

### PERSONAL DETAILS

• Date of Birth: 7th October, 1984

Father's Name : Kalipada Giri, Mother's Name : Swapna Giri
Gender : Male, Nationality : Indian, Mother Tongue : Bengali

• Religion: Hindu, Place of Birth: Mohanpur, WB, India

• Telephone: +9133 66251994

Primary Email : kinsuk@nitttrkol.ac.in
Alternative Email : kinsuk84@gmail.com

• Homepage: http://www.nitttrkol.ac.in/kinsuk/home.html

 $\bullet \ \ Google\ Scholar: http://scholar.google.co.in/citations?user=oWfT2skAAAAJ\&hl=en$ 

 $\bullet \>\>\> Research\>Gate: https://www.researchgate.net/profile/Kinsuk-Giri$ 

• Orcid: https://orcid.org/0000-0003-2671-3079

• Linkedin: https://www.linkedin.com/in/kinsukgiri/

## **EDUCATIONAL QUALIFICATIONS**

• Doctor of Philosophy (Ph.D (Science)), Year of Passing: 2013

Institution: S. N. Bose National Centre for Basic Science, Kolkata, India

University: Jadavpur University, Kolkata, India

Thesis Title: Numerical Simulation of Viscous Accretion Flow Around Black Holes Which Include Shocks

Name of Thesis Supervisor: Prof. Sandip K. Chakrabarti

• Master of Science (M.Sc.), Year of Passing: 2007, Subject: Mathematics

Institution/University : Dept. of Mathematics, Visva-Bharati Central University, Santiniketan Marks Obtained : 978, Maximum Marks : 1200, Percentage : 81.50%, Division/Class : 1st

• Bachelor of Science (B.Sc.), Year of Passing: 2005

Subjects: **Mathematics** (Major), *Physics & Chemistry* (Minors)

Institution/University: Dept. of Mathematics, Visva-Bharati Central University, Santiniketan Marks Obtained: 781, Maximum Marks: 1000, Percentage: 78.10%, Division/Class: 1st

• Higher Secondary Degree (HS), Year of Passing: 2002

School/Council: Vidyasagar Vidyapith, Midnapore, WBCHSE

Marks Obtained: 800, Maximum Marks: 1000, Percentage: 80.00%, Division/Class: 1st

• Secondary Degree (Madhyamik), Year of Passing: 2000

School/Board: Baita M.N. High School, Baita, WBBSE

Marks Obtained: 646, Maximum Marks: 800, Percentage: 80.75%, Division/Class: 1st

## RESEARCH INTERESTS

- Machine Learning: Theories and Applications
- Computational Geometry
- Numerical Simulation and Parallel Computing
- Computational Astrophysics and Cosmology

## **COMPUTATIONAL SKILLS**

## **Programming Languages**

- PYTHON
- R
- FORTRAN
- (
- GW BASIC and Q BASIC
- Visual Basic
- · Turbo Pascal

## **Software Packages**

- SCILAB
- MATLAB
- Various Cloud Based ICT Tools
- Anaconda, Eclipse & R-Studio
- Shell Scripting
- Gnuplot
- Latex & Mathematica
- Ftools & Heasoft
- Super Mongo & Golden Surfer
- MS Excel & MS Access
- XAMP, HTML & PHP

# **Professional EXPERIENCES**

# PhD Research Experiences (5.8 Years)

Organisation / Institute	Designation	DoJ	DoL	Duration
				(Years)
S. N. Bose National Centre for Basic Science	JRF	08/01/2008	07/01/2010	2
S. N. Bose National Centre for Basic Science	SRF	08/01/2010	31/12/2012	3.0
S. N. Bose National Centre for Basic Science	E-SRF	01/01/2013	08/11/2013	0.8

# Post Doctoral Research Experiences (1.5 Years)

Organisation / Institute	Designation	DoJ	DoL	Duration
				(Years)
National Hsing Hua University	Post Doc	04/03/2014	31/08/2015	1.5

# Teaching, Training and Research Experiences (9.4 Years)

Organisation / Institute	Designation	DoJ	DoL	Duration
				(Years)
CIPET Ahmedabad	Lecturer	11/11/2013	31/01/2014	0.2
NITTTR Kolkata	Asst. Professor	11/09/2015	Now	9.2

# **AICTE-NITTT Modules Completed: 8 Nos.**

- 1. Orientation towards Technical Education & Curriculum Aspects
- 2. Professional Ethics & Sustainability
- 3. Communication Skills, Modes and Knowledge Dissemination
- 4. Instructional Planning and Delivery
- 5. Technology Enabled Learning and Life-long Self-learning
- 6. Student Assessment and Evaluation
- 7. Creative Problem Solving, Innovation and Meaningful R&D
- 8. Institutional Management & Administrative Procedures

## ACADEMIC FELLOWSHIPS, AWARDS, GRANTS

- Best Paper Award for titled with "Lung CT image segmentation with optimal parameters using UNET Architecture" in the IEEE international conference DABcon2024 during Nov 21-23, 2024. November, 2024
- 2. Best Application Paper Award (Under Faculty Category) for my presented paper titled "Identifying Outliers using Voronoi Circles" in 12th SocPros jointly organized by IIT Roorkee and Liverpool Hope University during August 11-13, 2023. The sponsors of the conferences were IIT Roorkee, Liverpool Hope University, Deloitte., Springer and DRDO, August, 2023
- 3. Certificate of Graditude from VOKAL for Contributing India's Vernacular Knowledge Base on VOKAL Nov, 2019
- 4. DST-SERB International Conference Support Award to attend 41st COSPAR Scientific Assembly held at Istanbul, Turkey, August, 2016
- 5. Springer Outstanding Ph.D Thesis Award from Springer International Publication House, **Sept**, **2014**
- 6. Post Doctoral Research Fellowship from National Science Council (NSC) of Taiwan, Taiwan, **Dec**, **2013**
- 7. National Eligibility Test for Junior Research Fellowship (NET JRF) from CSIR-UGC, India, May, 2008
- 8. National Eligibility Test for Lectureship (NET LS) from CSIR-UGC, India, May, 2007 & Oct, 2007
- 9. JAM, 2005 Conducted by IITs, India, May, 2005
- 10. SNBNCBS JRF & SRF from S. N. Bose National Centre for Basic Science, Kolkata, Jan, 2008 & Jan, 2010
- 11. SNBNCBS ESRF from S. N. Bose National Centre for Basic Science, Kolkata, Jan, 2013
- 12. HONOURABLE MENTION POSTER AWARD from International Centre for Theoretical Physics (ICTP), Italy, Nov, 2011
- 13. BEST POSTER AWARD (3 times) from S. N. Bose National Centre for Basic Science, Kolkata, 2009, 2011 & 2013
- 14. Full Travel and Accomodation Grant from International Centre for Theoretical Physics (ICTP), Italy, Oct, 2011
- 15. Travel and Accommodation Gtrant from South Asian Physics Foundation (SAPF), Asia, Oct, 2010
- 16. Partial Travel and Accommodation Support from International Union of Pure and Applied Physics (IUPAP), Sweden, June, 2012
- 17. Full Financial Grant from COSPAR, Europe, July, 2012
- 18. Partial Financial Grant from Kyoto University, Kyoto, Japan, Oct, 2012

## PUBLICATIONS AND PREPRINTS

## Papers Published/Accepted in SCI/Scopus Journals

- "Conductive Islands Assisted Resistive Switching in Biomimetic Artificial Synapse for Associative Learning and Image Recognition", by Rajesh Jana, Ritamay Bhunia, Swapnamoy Paramanik, Kinsuk Giri and Avijit Chowdhury, Advanced Functional Materials, 2412804, 2024, SCI Impact Factor 18.5
- 2. "A Computational Study on the Modelling of the Flow Field Plates of a Polymer Electrolyte Membrane Fuel Cell" by Susmita Singh, Kinsuk Giri and Adrita Chaudhury Journal of Nano- Electron. Phys., Vol. 16, No 4, 04013, 2024, **Scopus Impact Factor 0.72**
- 3. "Remarkable Contributions by Jaina Mathematicians in Ancient India" by **Kinsuk Giri** and Debi Prasad Mishra, Journal of Engineering, Science & Education (JESE), Vol. 1, No 1, 32, 2024
- 4. "Modelling of Gas Diffusion Layer (GDL) of Polymer Electrolyte Membrane (PEM) Fuel Cell A Computational Approach" by Susmita Singh, Kinsuk Giri, Adrita Chaudhury, Tanya Nishad, Debasmita Paul and Priya Poddar, Journal of Nano- Electron. Phys., Vol. 15, No 3, 3006, 2023, Scopus Impact Factor 0.72
- "ECKM: An improved K-means clustering based on computational geometry" by Tuhin K. Biswas, Kinsuk Giri and Samir Roy, Expert Systems with Applications, Elsevier, 212, 118862, 2023, SCI Impact Factor: 7.5
- "Computational Modelling of Surface Modified Carbon Nanotube for Low Temperature Fuel Cell" by Susmita Singh, Kinsuk Giri, Adrita Chaudhury and Somerup Ponda, Journal of Nano- Electron. Phys., Vol. 14, No 3, 03014, DOI: 10.21272/jnep.14(3).03014, 2022, Scopus Impact Factor 0.72
- 7. "Constraints on cubic and f (P) gravity from the cosmic chronometers, BAO & CMB datasets: Use of machine learning algorithms" by **Kinsuk Giri** and Prabir Rudra, Nuclear Physics B, Elsevier, Volume 978, No 115746, 2022, **SCI Impact Factor: 2.5**
- 8. "ECR-DBSCAN: An Improved DBSCAN Based on Computational Geometry" by Kinsuk Giri, Tuhin K. Biswas and Pritisha Sarkar, Machine Learning with Applications, Elsevier, Volume 6,No 100148, 2021, Companion Journal of ESWA of Impact Factor: 7.5
- 9. "Observational Constraint in f(R,T) gravity from the cosmic chronometers and some standard distance measurement parameters" by Prabir Rudra and **Kinsuk Giri**, Nuclear Physics B, Elsevier, Volume 967, No 115428, June, 2021, **SCI Impact Factor : 2.5**
- 10. "Simulation of Diurnal Variation of Sub-Ionospheric VLF Transmitter Signals Using Machine Learning Approach" by Kinsuk Giri, Sujay Pal, Tuhin K.Biswas and S.K. Midya in Romanian Journal of Physics, Volume 66, pp 807, 2021, SCI Impact Factor: 1.4
- 11. "Dynamics of Magnetic Flux Tubes in an Advective Flow around a Black Hole", by Arnab Deb, Kinsuk Giri & Sandip K. Chakrabarti, in Monthly Notices of the Royal Astronomical Society, Oxford University Press, Volume 472, Issue 2, p.1259-1271, 2017, SCI Impact factor: 5.226
- 12. "Numerical Simulation of Vertical Oscillations in an Axisymmetric Thick Accretion Flow around a Black Hole", by Arnab Deb, **Kinsuk Giri** and Sandip K. Chakrabarti in Monthly Notices of the Royal Astronomical Society, Oxford University Press, Volume 462, Issue 4, Page 3502-3510, 2016, **SCI Impact factor: 5.226**
- 13. "Effects of Turbulent Viscosity on A Rotating Gas Ring Around A Black Hole: The Density Profile and Timescales in Numerical Simulation" by **Kinsuk Giri** and H. K Chang in Astronomische Nachrichten, Wiley, Volume 336, Issue 10, pp 1005-1012, 2015, **SCI Impact Factor: 1.2**
- 14. "Segregation of a Keplerian disk and sub-Keplerian halo from a Transonic flow around a Black Hole by Viscosity and Cooling processes", by **Kinsuk Giri**, Sudip K. Garain and Sandip K.

- Chakrabarti in Monthly Notices of the Royal Astronomical Society (MNRAS), Oxford University Press, Volume 448, Issue 4, pp 3221-3228, 2015, **SCI Impact Factor: 5.226**
- 15. "Hydrodynamic Simulation of Two Component Advective Flows around Black Holes", by **Kinsuk Giri** and Sandip K. Chakrabarti in Monthly Notices of the Royal Astronomical Society (MN-RAS), Oxford University Press & Wiley-Blackwell, Volume 430, Issue 4, pp 2836-2843, 2013, **SCI Impact Factor: 5.226**
- 16. "Hydrodyinamic Simulations of Viscous Accretion Flows Around Black Hole", by Kinsuk Giri and Sandip K. Chakrabarti. Accepted in Monthly Notices of the Royal Astronomical Society (MNRAS), Oxford University Press & Wiley-Blackwell, Volume 421, Issue 1, pp 666-678, 2012, Impact Factor: 5.226
- 17. "Effect of Compton Cooling on the Hydrodynamic and the Spectral Properties of a Two Component Accretion Flow around a Black Hole", by Himadri Ghosh, Sudip Garain, **Kinsuk Giri** and Sandip K. Chakrabarti. Published in Monthly Notices of the Royal Astronomical Society (MNRAS), Oxford University Press & Wiley-Blackwell, Volume 416, Issue 2, pp 959-971, 2011, **SCI Impact Factor:** 5.226
- 18. "Hydrodynamic simulations of oscillating shock waves in a sub-Keplerian accretion flow around black holes", by **Kinsuk Giri**, Sandip K.Chakrabarti, M.M. Samanta and D. Ryu. Published in Monthly Notices of the Royal Astronomical Society (MNRAS), Oxford University Press & Wiley-Blackwell, Volume-403, Issue 1, Pages 516-524, 2010, **SCI Impact Factor:** 5.226
- 19. "VLF signals in summer and winter in the Indian sub-continent using multi-station campaigns", by S. K. Chakrabarti et al., Indian Journal of Phys. (IJP), Springer, Volume 86, Issue 5, pp 323-334, 2012, SCI Impact Factor: 1.7

# Papers Published/Presented in Conferences

- 1. "Lung CT Image Segmentation with Optimal Parameters Using UNET Architecture" by Barun Kr. Paul, Tuhin K. Biswas and Kinsuk Giri, IEEE Explore, Page: 01-06, doi: 10.1109/DAB-Con63472.2024.10919399, 2025
- 2. "Lung CT image segmentation with optimal parameters using UNET Architecture" by Barun Kr. Paul, Tuhin Kumar Biswas and Kinsuk Giri in the IEEE international conference DABcon2024, organized by Narula Institute of Technology, Kolkata, November 21-23, 2024
- 3. "A Computational Study on the Modelling of The Flow Field Plates of a Polymer Electrolyte Membrane Fuel Cell", by Susmita Singh, **Kinsuk Giri** and Adrita Chowdhury,ICET, Malda, West Bengal,India, IRRET 2024, March, 2024
- 4. "Identifying Outliers using Voronoi Circles" by **Kinsuk Giri** in 12thSocPros jointly organized by IIT Roorkee and Liverpool Hope University, August 11-13, 2023
- 5. "Modelling of Gas Diffusion Layer (GDL) of Polymer Electrolyte Membrane (PEM) Fuel Cell- A Computational Approach" by Susmita Singh, **Kinsuk Giri**, Adrita Chaudhury, Tanya Nishad, Debasmita Paul and Priya Poddar, IRRET 2023, ICET, Malda, West Bengal,India, April 9 10, 2023
- 6. "Determining Optimal Epsilon (eps) for DBSCAN using Empty Circles" by Kinsuk Giri & Tuhin K. Biswas,ICRTAC-AIT-2020, Lecture Notes in Electrical Engineering, AISE, vol 836, Page 265-75, Springer, Singapore, 2022
- 7. "Computational Modelling of Surface Modified Carbon Nanotube for Polymer Electrolyte Membrane Fuel Cell (PEMFC)" by Susmita Singh, **Kinsuk Giri**, Adrita Chaudhury & Somerup Ponda, ICTFC-2022, Sakarya University of Applied Sciences, Sakarya, Turkey, Jan 6-8, 2022
- 8. "A Computational Study on the Modelling of Surface Modified Carbon Nanotube for Low Temperature Fuel Cell" by Adrita Chaudhury, Somerup Ponda, **Kinsuk Giri** and Susmita Singh. International Conference on Nanomaterials: Recent Developments and New Directions, Cape Comorin Conference, October, 2021

- 9. "Determining Optimal Epsilon (eps) on DBSCAN using Empty Circles", by Kinsuk Giri & Tuhin K. Biswas, AISE 2020, NIT Goa, India, Springer, Jan 2021
- 10. "A Novel Approach for Initializing Centroid at K-Means Clustering in Paradigm of Computational Geometry", by Tuhin K. Biswas and Kinsuk Giri, ICRTAC AIT 2020, VIT Chennai, India, Springer, 2021
- 11. "Remarkable Contributions by Jain Mathematicians in Ancient India" by Kinsuk Giri & Debi Prasad Mishra, AISTEM 2021, NITTTR Kolkata
- 12. "An Intelligent Technique to Find Bi-cliques and its Application to Optimum Matching Problem", by Pritisha Sarkar & Kinsuk Giri, ic-ETITE, IEEE, 2019, DOI: 10.1109/ic-ETITE47903.2020.61
- 13. "Higher Order Stability Analysis for Astrophysical Accretion Processes", by Kinsuk Giri & Sayan Kundu, Proceedings in Mathematics & Statistics, Springer, 342, 73-79, March, 2021
- 14. "Possible Images of Sgr A\* in Two Component Advective Flow Paradigm", by Kinsuk Giri, Sandip K. Chakrabarti & Arka Chatterjee, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 15. "Segregation of Disc, Halo and Outflow from a Transonic Flow around a Black hole", by Kinsuk Giri & Sandip K. Chakrabarti, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 16. "Higher Order Stability Analysis for Astrophysical Accretion Processes", by **Kinsuk Giri** & Sayan Kundu, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 17. "Time dependant spectral properties of Two Component Advective Flow", by Arnab Deb, Sandip K. Chakrabarti & Kinsuk Giri, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 18. "Vertical Oscillation in thick accretion flow and its effect on outflows", by Arnab Deb, Sandip K. Chakrabarti & Kinsuk Giri, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 19. "Time dependant spectral properties of Two Component Advective Flow", by Arnab Deb, Sandip K. Chakrabarti & Kinsuk Giri, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 20. "How outflows are collimated and accelerated? role of toroidal magnetic flux tubes", by Arnab Deb, Sandip K. Chakrabarti & Kinsuk Giri, 42nd COSPAR Scientific Assembly, 14-22 July, Pasadena, California, 2018
- 21. "Magnetic flux tubes as collimators and accelerator of outflow" by Arnab Deb, by **Kinsuk Giri** and Sandip K. Chakrabarti, Conference on Recent Trends in the study of Compact Objects Theory and Observation (RETCO III), 5-7th June, 2017 IIST, India, 2017
- 22. "Effects of Vertical Oscillations on Outflows in a Thick Accretion Flow around a Black hole" by Kinsuk Giri, Arnab Deb and Sandip K. Chakrabarti, International Conference on Wide Band Spectral and Timing Studies of Cosmic X-ray Sources, TIFR-Mumbai, India, 2017
- 23. "Effects of Magnetic Flux Tubes on the Origin, Acceleration and Collimation of Outflows from an Advective Flow" by Arnab Deb, Kinsuk Giri and Sandip K. Chakrabarti, International Conference on Wide Band Spectral and Timing Studies of Cosmic X-ray Sources, TIFR-Mumbai, India, 2017
- 24. Time Evolution of a Rotating Gas Ring Around a Black Hole in Presence of Viscosity and Cooling" by Kinsuk Giri, 41th COSPAR Scientific Assembly, Istanbul, Turkey, 2016
- 25. "Dynamics of magnetic flux tubes in an advective flow around black a hole" by Arnab Deb, **Kinsuk** Giri & Sandip K. Chakrabarti, 41st COSPAR Scientific Assembly, Istanbul, Turkey, 2016

- 26. "Numerical simulations of a Two Component Advective Flow for the study of the spectral and timing properties of black holes", by Kinsuk Giri and Sandip K. Chakrabarti, Proceedings of the Thirteenth Marcel Grossmann Meeting, World Scientific Publishing Co. Pte. Ltd., 2015. ISBN 9789814623995, pp. 2401-2403, 2015
- 27. "Formation of Two Component Advective Flow by Numerical Simulations and Monte-Carlo simulations of their spectral properties", by S. K. Chakrabarti, S. Garain, Kinsuk Giri, H. Ghosh, 40th COSAPAR Scientific Assembly, Moscow, Russia, Abstract E1.5-5-14, 2014
- 28. "Effects of Turbulent Viscosity on A Rotating Gas Ring Around A Black Hole: Results of Numerical Simulation" in Conference in Accretion and Outflows throughout the Scales, Oct 1-3, 2014, Centre Blaise Pascal, ENS Lyon, France
- 29. "Two Component Advective Flows Around Black Holes: Theory, simulations and observational verifications", by S. K. Chakrabarti et al., 40th COSAPAR Scientific Assembly, Moscow, Russia, Abstract E1.13-12-14, 2014
- 30. "Role of Viscosity and Cooling in Hydrodynamic Simulation of. Two Component Accretion Flow (TCAF) around Black Holes", by **Kinsuk Giri** and Sandip K. Chakrabarti, Astronomical Society of India Conference Series (BASI), Vol. 8, pp 15-18, 2013
- 31. "Monte-Carlo Simulations of Comptonization Process in a Two Component Accretion Flow around a Black Hole in Presence of an Outflow", byHimadri Ghosh, Sudip Garain, Kinsuk Giri and Sandip K. Chakrabarti, Proceedings of the Twelfth Marcel Grossmann Meeting on General Relativity, World Scientific Publication, Singapore, ISBN 9789814374514, pp 985, 2012
- 32. "Numerical simulations of a Two Component Advective flow for the study of the spectral and timing properties of BHs and NSs" by **Kinsuk Giri** and Sandip K. Chakrabarti, 39th COSPAR Scientific Assembly, Mysore, India. Abstract PEX.1-7-12, p.622, 2012
- 33. "Numerical simulations of a Two Component Advective Flow (TCAF): Is The Flow Stable?" in East Asia Numerical Astrophysics Meeting (EANAM5), Oct 28 Nov 2, 2012, YITP, Kyoto University, Kyoto, Japan
- 34. "How does a Two Component Advective Flow Form?" in International Conference on Astrophysics & Cosmology, March 19-21, 2012, Tribhuvan University, Kathmandu, Nepal
- 35. "Numerical Simulation of Standard Keplerian Disc around a Black Hole", ASROC Annual Meeting, 23-25 May, 2014, NTU Experimental Forest, Nantou, Taiwan
- 36. "Time Dependent Accretion on to Stellar Compact Objects" in in **Bose Fest 2009** (organized by SNBNCBS) at 2nd April, 2009, EZCC, Kolkata
- 37. "Time Dependent Accretion on to White Dwarfs" Symposium on Developments in Space Research in the Last 25 Years, 16th November, 2008, Indian Centre for Space Physics, Kolkata, India

# Book, Book Chapters & Articles

- "Numerical Simulation of Viscous Shocked Accretion Flows Around Black Holes" by Kinsuk Giri, Springer-Verlag, Berlin, 2014 ISBN: 978-3319095400 (Online), 978-3319095394 (print), DOI: 10.1007/978-3-319-09540-0
- "Identifying Outliers Using Voronoi Circles" by Tuhin K. Biswas and Kinsuk Giri, Lecture Notes in Networks and Systems, Proceedings of the 12th International Conference on Soft Computing for Problem Solving, Springer, Volume 1, page 551-562, 2024
- 3. "Applications of Computational Geometry in Clustering: A Review" by Tuhin K. Biswas and Kinsuk Giri, Advances in Modern and Applied Sciences, Scientific Research Pub-USA, p-202, 2022
- 4. "Determining Optimal Epsilon (eps) for DBSCAN using Empty Circles" by Kinsuk Giri & Tuhin K. Biswas,ICRTAC-AIT-2020, Lecture Notes in Electrical Engineering, AISE, vol 836, Page 265-75, Springer, Singapore, 2022

- 5. "A Novel Approach for Initializing Centroid at K-Means Clustering in Paradigm of Computational Geometry" by Tuhin K. Biswas and **Kinsuk Giri**, Artificial Intelligence and Technologies. Lecture Notes in Electrical Engineering, vol 806. Springer, Singapore, page 445-452, 2021
- 6. "Higher Order Stability Analysis for Astrophysical Accretion Processes", by Sayan Kundu and Kinsuk Giri, Springer Proceedings in Mathematics & Statistics 342978 981 15 9708 46
- 7. "A Novel Approach for Initializing Centroid at K-Means Clustering in Paradigm of Computational Geometry" by Tuhin K. Biswas and Kinsuk Giri, Springer, Singapore, Print ISBN 978-981-16-6447-2, Vol 8, Page: 445-452, 2021
- 8. An Intelligent Technique to Find Bicliques and its Application to Optimum Matching Problem", by Pritisha Sarkar and **Kinsuk Giri**, 978-1-7281-4142-8/\$31.0, IEEE
- 9. "The Story of the First Picture of a Black Hole", by Kinsuk Giri, NITTTR Kolkata Newsletter, Vol 13, No 2, September, 2021
- 10. "Formation of Two Component Flows by Numerical Simulations Around Black Holes" by **Kinsuk Giri**, Astrophysics and Space Science Proceedings, Volume 53. ISBN 978-3-319-94606-1. Springer International Publishing AG, P-131, Springer Nature, 2018
- 11. "NUMERICAL SIMULATIONS OF A TWO COMPONENT ADVECTIVE FLOW FOR THE STUDY OF THE SPECTRAL AND TIMING PROPERTIES OF BLACK HOLES" by Kinsuk Giri and Sandip K. Chakraborti, https://doi.org/10.1142/97898146239950451, MG13 Proceddings, 2015
- 12. Role of viscosity and cooling in hydrodynamic simulation of Two Component Accretion Flow (TCAF) around black holes", by **Kinsuk Giri** and Sandip K. Chakrabarti, ASI Conference Series, 2013, Vol. 8, pp 15–18
- 13. "Time Dependent Accretion on to Stellar Compact Objects", by **Kinsuk Giri** under the supervision of Prof. Sandip K. Chakrabarti, during Ph.D course work of 2nd semester in S.N. Bose National Centre for Basic Sciences, Kolkata, 2008.
- 14. "Infall time-scales of sub-Keplerian accretion flow around black holes: Hydrodynamic simulation", by **Kinsuk Giri** under the supervision of Prof. Sandip K. Chakrabarti, during Ph.D course work in S.N. Bose National Centre for Basic Sciences, Kolkata, 2009.
- 15. "Numerical Simulations of Standing and Oscillating Shocks around black holes" by **Kinsuk Giri**, A review article which is submitted to Jadavpur University in the purpose of Ph.D course work, October, 2010.

# CISD Training / BOPT Apprenticeship (NSQF) Job Roles DEVELOPED

- 1. **PYTHON Programming and R**, Designed, Developed and Offered for 3 Months CISD Training, August 2024 to October 2024, NITTTR Kolkata, India
- 2. **"Advanced Excel Specialist"**, Designed and Developed for Board of Practical Training Eastern Region (BOPT) Apprenticeship Training for NSQF in the sector of IT/ITes, 2024
- 3. " Data Entry Operator", Designed and Developed for Board of Practical Training Eastern Region (BOPT) Apprenticeship Training for NSQF in the sector of IT/ITes, 2024

# **MOOC SWAYAM Program DEVELOPED and OFFERED**

- 4. "Academic and Research Report Writing", Start Date: 07/01/2019, End Date: 01/03/2019, No. of Enrolled Participants: 4468
- 5. "Problem Based Learning", Start Date: 07/01/2019, End Date: 01/03/2019, No. of Enrolled Participants: 4093
- 6. "Academic and Research Report Writing", Start Date: 27/01/2020, End Date: 30/03/2020, No. of Enrolled Participants: 6282

- 7. "Problem Based Learning", Start Date: 24/02/2020, End Date: 17/04/2020, No. of Enrolled Participants: 855
- 8. "Academic and Research Report Writing", Start Date: 20/07/2020 End Date: 12/10/2020, No. of Enrolled Participants: 8346
- 9. "Academic and Research Report Writing", Start Date: 31/01/2021 End Date: 12/04/2021, No. of Enrolled Participants: 8146
- 10. "Academic and Research Report Writing", Start Date: 30/07/2021 End Date: 31/10/2021, No. of Enrolled Participants: 10563
- 11. "Problem Based Learning", Start Date: 31/01/2021 End Date: 12/04/2021, No. of Enrolled Participants: 432
- 12. "Academic and Research Report Writing", Start Date: 29/01/2024 End Date: 30/04/2024, No. of Enrolled Participants: 6200

## INVITED LECTURES DELIVERED

- 1. "ICT Tools in Teaching and Learning", Faculty Induction Program on Effective Teaching Strategies and Classroom Management, December 16, 2024, Sri Vasavi Engineering College, Tadepalligudem, India
- 2. "Uses of ICT Tools in Interactive Teaching and Learning", JNV STEM Teachers Training Programme, December 06, 2024, NIT Durgapur, India
- 3. "Research Methodologies and Methods", **Training Program for Newly Recruited IES**, October 24, 2024, CSTARI, Kolkata, India
- 4. "Application of Computational Geometry in ML", Half Day Worskshop, September 07, 2024, Indian Centre for Space Physics (ICSP), Kolkata, India
- 5. "Introduction to ML", **Half Day Worskshop**, September 07, 2024, Indian Centre for Space Physics (ICSP), Kolkata, India
- 6. "PYTHON Programming", One Day Seminar, March 02, 2024, Asutosh College, Kolkata, India
- 7. "Parallel Computing and HPC", **Six Day FDP Program**, February 13, 2024, Mahadevananda Mahavidyalaya, Barrackpore, India
- 8. "Mathematical and Statistical Problem Solving using ML", **Two Day's Workshop on AI and ML**, March 29, 2023, Amity University, Kolkata, India
- 9. "Writing in Latex, Python programming and Machine learning", Ad-on Program, March 23, 2023, Malda College, Malda, India
- 10. "ICT Tools in Teaching Learning", **Special FDP Program**, July 15, 2022, Durgapur Institute of Advanced Technology and Management, Durgapur, India
- 11. "Data Science with PYTHON", **One Day Worskshop**, May 7, 2022, Omdayal Group of Institutions, Howrah, India
- 12. "Fundamentals of Data Science", **5-Day International Workshop on Data Science & its Applications**, April, 28, 2022, Adamas University, Kolkata, India
- 13. "Research Methodologies and Methods", **Training Program for Newly Recruited IES**, March 15, 2022, CSTARI, Kolkata, India
- 14. "Career Counselling", **One Day College Level Webinar**, January 5, 2022, Bajkul Milani Mahavidyalaya, Kismat Bajkul, West Bengal, India
- 15. "Optimization for Machine Learning", AICTE ATAL FDP on Machine Learning with R, October 29, 2021, AICTE-ATAL, NITTTR Kolkata, India

- 16. "Open Source Academic Software and Their Uses", STTP on Mathematical Software, September 17, 2021, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India
- 17. "Need of Optimization for Engineers", **Special Webinar**, June 19, 2021, Shree Ramkrishna Institute of Science and Technology (SRIST), Kolkata, India
- 18. "Tools and Techniques Used for Thesis Writing", Five Day's Workshop on Academic and Research Writing, March 25, 2021, ATME College of Engineering, Mysuru, Karnataka, India
- 19. "Uses of Open Source Academic Software", Albertian Knowledge Summit (AKS 2021), March 21, 2021, St. Alberts College, Kochi, Kerala, India
- 20. "Online Teaching-Learning and Assessment during COVID-19Pandemic: Strength, Weakness, Opportunity and Challenges to the Institution and System", **One-Day State Level Webinar**, February 26, 2021, Bajkul Milani Mahavidyalaya, Kismat Bajkul, West Bengal, India
- 21. "Understanding The Concepts of UG Level Mathematics through Graphical Demonstration using SCILAB", One-Day E-workshop, January 30, 2021, Krishna Chandra College, Birbhum, West Bengal, India
- 22. "Uses of Open Source Software in Scientific Computing", **Special Webinar Series"**, October 10, 2020, B. P. Mandal College of Engineering, Madhepura, Bihar, India
- 23. "Unsupervised Learning with PYTHON Hands-on", AICTE-ATAL FDP on Application of Artificial Intelligence and Machine Learning in Engineering Problems", September 15, 2020, NERIST, Nirjuli, India
- 24. "Supervised Learning with PYTHON Hands-on", AICTE-ATAL FDP on Application of Artificial Intelligence and Machine Learning in Engineering Problems, September 14, 2020, NERIST, Nirjuli, India
- 25. "Graphical Demonstration as Teaching Aid in Connection with Graduate Level Mathematics", A Special Webinar offered from Dept. of Mathematics, August 8, 2020, Asutosh College, Kolkata, India
- 26. "Ancient Indian Mathematics", **9th National Seminar (web) on Ancient Indian Science and Technology"**, July 13, 2020, NITTTR Kolkata & SPIU Uttar Pradesh, India
- 27. "Advantages of Problem Based Learning (PBL)", Special Lecture at Dept. of Mathematics, June 28, 2020, Adamas University, Kolkata, India
- 28. "Problem Based Learning", **Special Lecture on Science Day**, February 28, 2020, Vivekananda College Thakurpukur, Kolkata, India
- 29. "Accretion Processes around a Black hole", Special Lecture Series of Adamas University, Kolkata, September 18, 2019, Adamas University, Kolkata, India
- 30. "Advantages and Limitations of High Performance Computing (HPC)", **TEQIP-III Worskshop** on Mathematical Modeeling and Scienetific Computing, August, 26, 2019, National Institute of Technology (NIT), Manipur, Imphal, India
- 31. "SCILAB and It's Applications in Astrophysics and Mathematics", TEQIP-III Worskshop on Computational and Analytical Methods in Physics and Mathematics, February 19, 2019, National Institute of Technology (NIT), Manipur, Imphal, India
- 32. "How Does an Accretion Flow Form around a Black Hole?", **TEQIP-III Sponsored Worskshop** on Computational and Analytical Methods in Physics and Mathematics, February 20, 2019, National Institute of Technology (NIT), Manipur, Imphal, India
- 33. "Introduction to Scientific Computing with Open Source Software", **TEQIP-III Sponsored FDP** on Opensource Software for Statistical and Mathematical Analysis", February 9, 2019, Jorhat Institute of Science and Technology (JIST), Jorhat, Assam, India

- 34. "Functions, Programming Environment and Visualizations in SCILAB", TEQIP-III Sponsored FDP on Opensource Software for Statistical and Mathematical Analysis", February 10, 2019, Jorhat Institute of Science and Technology (JIST), Jorhat, Assam, India
- 35. "Introduction to SCILAB", Open Source Software in Academia and Research (OSSAR, 2018), August 7, 2018, National Institute of Technology (NIT), Durgapur, West Bengal, India
- 36. "How Does Matter Behave Around a Black Hole?", National Workshop Sponsored by SERB, DST, Govt. of India, 1st August, 2017, Dept. of Mathematics, University of Burdwan, Burdwan, West Bengal, India
- 37. "Relations Vs Functions", **Ten Day Workshop** (FDP), 23rd May, 2017, KV-1, Saltlake, Kolkata, India
- 38. "Introduction to Scilab", One Day Workshop (FDP), 3rd December, 2016, Technoindia University, Kolkata, India
- 39. "Method of Proofs and Recurance Relations", **TEQIP-II Sponsored Faculty Development Program**, 28th October, 2016, Tripura Institute of Technology (TIT), Agartala, India
- 40. "Counting Techniques and Combinatorics", **TEQIP-II Sponsored Faculty Development Program**, 27th October, 2016, Tripura Institute of Technology (TIT), Agartala, India
- 41. "Introduction to Discrete Mathematics", TEQIP-II Sponsored Faculty Development Program, 26th October, 2016, Tripura Institute of Technology (TIT), Agartala, India
- 42. "Time Evolution of Rotating Gas Ring Around a Black Hole in Presence of Viscosity and Cooling", UGC Funded National Level Conference, 7th September, 2016, Krishnagar Women's College, West Bengal,India
- 43. "How does a Two Component Advective Flow Form?" in ASIAA Colloquium, 29th July, 2015, Academia Sinica, Taipei, Taiwan
- 44. "Numerical Simulation of Viscous Shocked Accretion Flows Around Black Holes" in IOA Colloqium, 10th March, 2014, National Tsing Hua University, Hsinchu, Taiwan

#### LIST OF WORKSHOPs/SEMINARs/CONFERENCES ORGANIZED

- 1. Coordinated Conference 1st International Conference on Bharatiya Traditional Knowledge System (BTKS 2024), on July 26 27, 2024, NITTTR Kolkata, India
- 2. Coordinated Seminar 13th National Seminar (Virtual) on Ancient Indian Science and Technology(AIST 2024), November 09, 2023, NITTTR Kolkata, India
- 3. Coordinated Seminar 12th National Seminar (Virtual) on Ancient Indian Science and Technology(AIST 2023), September 30, 2023, NITTTR Kolkata, India
- 4. Coordinated Worskhop One Day Workshop for Celebrations for Rakshanbandhan (by Brahma Kumaris), August 31, 2023, NITTTR Kolkata, India
- 5. Coordinated Seminar 11th National Seminar on Ancient Indian Science, Technology, Engineering and Mathematics (AISTEM-2022), October 15, 2022, NITTTR Kolkata, India
- Coordinated Conference National Conference (Virtual) on Ancient Indian Science, Technology, Engineering and Mathematics (AISTEM-2021), March 19-20, 2021, NITTTR Kolkata, India
- 7. Organized (as a member) Seminar **Two Day National Seminar on Ancient Indian Education System**, November 11 12, 2020, NITTTR Kolkata & SPIU Uttar Pradesh, India
- 8. Coordinated Workshop Two Days Discussions on The Draft of National Education Policy **2019 STTP**, July-23-24, 2019, NITTTR, Kolkata, India
- 9. Organized (as a member) Seminar 10th National Seminar(web) on Atmanirbhar Bharat: Atmanirbhar Bharat: Environmental Sustainability, August 16, 2020, NITTTR Kolkata & SPIU Uttar Pradesh, India

- 10. Co-Coordinated Regional Workshop on Quality and Sustainable TVET and International Seminar on Skills in TVET for Sustainability, 24-28 October, 2017, NITTTR, Kolkata
- 11. Co-Coordinated Conference 1st Regional Science & Technology Congress, Presidency Division, 13-14 November, 2016, NITTTR, Kolkata

## LIST OF STTPs/FDPs Conducted

- 1. Coordinated STTP R Programming, March 24-28,2025, NITTTR Kolkata Extension Centre, Guwahati, India
- 2. Coordinated STTP Machine Learning with PYTHON, March 17 21, 2025, NITTTR Kolkata, India
- 3. Coordinated STTP Introduction to Indian Knowledge System (IKS), March 03-07, 2025, NITTTR Kolkata, India
- 4. Coordinated STTP PYTHON Programming, Feb 17-21, 2025, NITTTR Kolkata, India
- 5. Coordinated E-STTP Problem Based Learning, Feb 24 28, 2025 NITTTR Kolkata, India
- 6. Coordinated E-STTP Problem Based Learning, Feb 03 07, 2025 NITTTR Kolkata, India
- 7. Coordinated STTP Mathematical Foundation of Computer Science, Jan 06 17, 2025, NITTTR Kolkata, India
- 8. Coordinated STTP **R Programming**, December 30, 2024 January 03, 2025, NITTTR Kolkata Extension Centre, Bhubaneshwar, India
- 9. Coordinated E-STTP Problem Based Learning, December 09 20, 2024, NITTTR Kolkata, India
- 10. Coordinated STTP Problem Solving with R, November 11 15, 2024, NITTTR Kolkata, India
- 11. Coordinated STTP ICT Tools for Assessment, April 10 12, 2024, NITTTR Kolkata, India
- 12. Coordinated STTP Academic Writing and Tools, September 23 October 04, 2024, NITTTR Kolkata, India
- Coordinated STTP Problem Solving with PYTHON, September 09 13, 2024, NITTTR Kolkata, India
- 14. Coordinated STTP Word Processing with LaTeX, August 12 16, 2024, NITTTR Kolkata, India
- 15. Coordinated STTP Discrete Mathematics for Engineering , July 01 05, 2024, NITTTR Kolkata, India
- 16. Coordinated STTP SCILAB Programming, June 10 14, 2024, NITTTR Kolkata, India
- 17. Coordinated STTP ICT Tools for Assessment, April 10 12, 2024, NITTTR Kolkata, India
- 18. Coordinated STTP Machine Learning with Python, March 18 22, 2024, NITTTR Kolkata, India
- 19. Coordinated STTP Cloud Computing and HPC, February 05 09, 2024, NITTTR Kolkata, India
- 20. Coordinated STTP Mathematical Foundation of Computer Science, January 08 12, 2024, NITTTR Kolkata, India
- 21. Coordinated STTP Academic Writing and Tools, December 04 15, 2023, NITTTR Kolkata, India
- 22. Coordinated STTP R Programming, December 06 12, 2023, IMIT Cuttack, India
- 23. Coordinated STTP Problem Solving with PYTHON, November 06 11, 2023, NITTTR Kolkata, India
- 24. Coordinated STTP R Programming, October 09 13, 2023, NITTTR Kolkata, India

- 25. Coordinated STTP Word Processing with Latex, August 21 25, 2023, SIET Dhenkanal, India
- 26. Coordinated STTP SCILAB Programming, May 08 12, 2023, NITTTR Kolkata, India
- 27. Coordinated STTP ICT Tools for Assessment, April 19 21, 2023, NITTTR Kolkata, India
- 28. Coordinated STTP ICT Tools for Effective Teaching and Learning, March 27 31, 2023, NITTTR Kolkata, India
- 29. Coordinated STTP Problem-Based Learning-Towards Advanced Pedagogy, March 20 24, 2023, NITTTR Kolkata, India
- 31. Coordinated STTP Machine Learning with PYTHON, February 13 17, 2023, NITTTR Kolkata, India
- 32. Coordinated STTP Mathematical Foundation of Computer Science, January 12 20, 2023, NITTTR Kolkata, India
- 33. Coordinated STTP Academic Writing and Tools, December 12 23, 2022, NITTTR Kolkata, India
- 34. Coordinated STTP Introduction to Advanced Pedagogy, November 14 25, 2022, NITTTR Kolkata, India
- 35. Coordinated STTP Word Processing with Latex, October 31 November 04, 2022, NITTTR Kolkata, India
- 36. Coordinated STTP Data Analytics with PYTHON, October 10-14, 2022, NITTTR Kolkata, India
- 37. Coordinated STTP Word Processing with Latex, September 19-23, 2022, NITTTR Kolkata, India
- 38. Coordinated STTP PYTHON Programming, August 08-19, 2022, NITTTR Kolkata, India
- 39. Coordinated ICT STTP Digital Tools for Faculty and Staff, July 11-15, 2022, NITTTR Kolkata, India
- 40. Acted as Resource Person at STTP **Induction Training**, June 20 July 1, 2022, NITTTR Kolkata, India
- 41. Acted as Resource Person at ICT STTP Advanced Pedagogy, June 13 24, 2022, NITTTR Kolkata, India
- 42. Coordinated STTP Academic Research Writing and LaTeX, June 13-24, 2022, NITTTR Kolkata, India
- 43. Coordinated STTP Digital Pedagogy and Tools for Teaching and Learning, May 23-27, 2022, NITTTR Kolkata, India
- 44. Acted as Resource Person at ICT STTP HRD through Training and Development, March 21-25, 2022, NITTTR Kolkata, India
- 45. Coordinated STTP HPC and Cloud Computing, March 14-18, 2022, NITTTR Kolkata, India
- 46. Coordinated ICT STTP Machine Learning with PYTHON, February 21 25, 2022, NITTTR Kolkata, India
- 47. Acted as Resource Person at ICT STTP Artificial Intelligence, February 14 18, 2022, NITTTR Kolkata, India
- 48. Coordinated STTP Introduction to PYTHON Programming, February 7 11, 2022, NITTTR Kolkata, India
- 49. Coordinated ICT STTP Mathematical Foundation of Computer Science, January 10 21, 2022, NITTTR Kolkata, India

- 50. Acted as Resource Person at ICT STTP Online Pedagogy, January 3 7, 2022, NITTTR Kolkata, India
- 51. Acted as Resource Person at ICT STTP Data Structures & Algorithms, Dec 27-31, 2021, NITTTR Kolkata, India
- 52. Acted as Resource Person at Special ICT STTP Research Methodology, Dec 21-31, 2021, NITTTR Kolkata, India
- Coordinated STTP Word Processing with LaTeX, December 13-17, 2021, NITTTR Kolkata, India
- 54. Acted as Resource Person at ICT STTP Managerial Skills for Technical Teacher, Dec 6-10, 2021, NITTTR Kolkata, India
- 55. Acted as Resource Person at ICT STTP **IICT Tools for Teaching and Learning**, Dec 6-10, 2021, NITTTR Kolkata, India
- 56. Acted as Resource Person at ICT STTP Induction Training, Nov 29 Dec 2, 2021, NITTTR Kolkata, India
- 57. Coordinated STTP Discrete Mathematics, November 15-19, 2021, NITTTR Kolkata, India
- 58. Acted as Resource Person at ICT STTP Soft Computing, October, 2021, NITTTR Kolkata, India
- 59. Coordinated STTP Problem Solving with SCILAB, October 4-8, 2021, NITTTR Kolkata, India
- 60. Coordinated STTP Hybrid Pedagogy, September 27 October 1, 2021, NITTTR Kolkata, India
- 61. Acted as Resource Person at ICT STTP **Induction Training**, August-Sept, 2021, NITTTR Kolkata, India
- 62. Coordinated STTP Problem Solving with PYTHON, August 09 13, 2021, NITTTR Kolkata, India
- 63. Acted as Resource Person at ICT STTP Managerial Skills for Technical Teachers, July 19 23, 2021, NITTTR Kolkata, India
- 64. Coordinated STTP Problem Based Learning, July 12 16, 2021, NITTTR Kolkata, India
- 65. Acted as Resource Person at ICT STTP Online Pedagogy, June 28 July, 2, 2021, NITTTR Kolkata, India
- 66. Coordinated STTP Numerical and Statistical Methods with SCILAB, June 21 25, 2021, NITTTR Kolkata, India
- 67. Coordinated Special Webinar Yoga Therapy and Post COVID Management, June 19, 2021, NITTTR Kolkata, India
- 68. Acted as Resource Person at ICT STTP Fuzzy and Rough Set Theory, June 14 18, 2021, NITTTR Kolkata, India
- 69. Acted as Resource Person at ICT STTP ICT Tools for Teaching and Learning 1, May 24 28, 2021, NITTTR, Kolkata, India
- 70. Coordinated STTP Machine Learning with PYTHON, May 17 21, 2021, NITTTR, Kolkata, India
- 71. Acted as Resource Person at ICT STTP Induction Training, May 3 8, 2021, NITTTR, Kolkata, India
- 72. Acted as Resource Person at **5th AICTE-NITTT Mentor Orientation Training Programme 5**, April 19 23, 2021, NITTTR Kolkata, India
- 73. Acted as Resource Person at 4th AICTE-NITTT Mentor Orientation Training Programme, April 5 9, 2021, NITTTR Kolkata, India
- 74. Acted as Resource Person at 3rd AICTE-NITTT Mentor Orientation Training Programme, March 15-19, 2021, NITTTR Kolkata, India

- 75. Coordinated STTP Mathematical Foundation of Computer Science, Feb 22 March 5, 2021, NITTTR, Kolkata, India
- 76. Acted as Resource Person at ICT STTP **Teaching Methodologies**, February 8 12, 2021, NITTTR, Kolkata, India
- 77. Acted as Resource Person at 2nd AICTE-NITTT Mentor Orientation Training Programme, Feb 5-9, 2021, NITTTR Kolkata, India
- 78. Coordinated MOTP Prg Orientation Training Programme [OTP] for Mentors of Higher Educational Institutions [HEIs], Jan 27 Feb 4, 2021, NITTTR Kolkata, India
- 79. Coordinated STTP Discrete Mathematics, January 11 15, 2021, NITTTR, Kolkata, India
- 80. Acted as Resource Person at ICT STTP Outcome Based Education in the context of Online Teaching, Dec, 2020, MIT AoE, Pune, India
- 81. Coordinated STTP Problem Based Learning, December 7 11, 2020, NITTTR, Kolkata, India
- 82. Acted as Resource Person at 1st AICTE-NITTT Mentor Orientation Training Programme, Nov 30 Dec 4, 2020, NITTTR Kolkata, India
- 83. Coordinated STTP Introduction to PYTHON Programming, November 16 20, 2020, NITTTR, Kolkata, India
- 84. Coordinated ICT STTP Hybrid Pedagogy, November 1 5, 2020, NITTTR, Kolkata, India
- 85. Acted as Resource Person at ICT STTP Induction Training, October 12 16, 2020, NITTTR, Kolkata, India
- 86. Acted as Resource Person at ICT STTP Induction to ICT Tools for Teaching and Learning, October 5 16, 2020, NITTTR, Kolkata, India
- 87. Coordinated STTP Numerical and Statistical Methods with SCILAB, Sept 28 Oct 2, 2020, NITTTR, Kolkata, India
- 88. Coordinated STTP Engineering Optimization, Aug 31 Sept 4, 2020, NITTTR, Kolkata, India
- 89. Acted as Resource Person at ICT STTP Induction Training Phase II, Aug 3 7, 2020, NITTTR, Kolkata, India
- 90. Coordinated STTP Problem Solving with SCILAB, July 27 31, 2020, NITTTR, Kolkata, India
- 91. Coordinated STTP Big Data Analytics, July 6 10, 2020, NITTTR, Kolkata, India
- 92. Coordinated STTP Introduction to PYTHON Programming, June 22 26, 2020, NITTTR, Kolkata, India
- 93. Coordinated STTP Problem Based Learning, May 25 -29, 2020, NITTTR, Kolkata, India
- 94. Coordinated STTP Numerical and Statistical Methods with PYTHON (Phase II), May 4 -8, 2020, NITTTR, Kolkata, India
- 95. Coordinated STTP Numerical and Statistical Methods with PYTHON (Phase I), April 27
  May 1, 2020, NITTTR, Kolkata, India
- 96. Acted as Resource Person at Vocational STTP Business Economics, Feb 24 28, 2020, NITTTR Kolkata, India
- 97. Coordinated STTP Discrete Mathematics and It's Applications, 13-17, January, 2020, NITTTR, Kolkata, India
- 98. Coordinated STTP Mathematical Foundation of Computer Science, Dec 23, 2020 Jan 3,2021, NITTTR, Kolkata, India
- 99. Coordinated STTP Research Methodology in Engineering and Technical Writing using LaTeX, 09-20, December, 2019, NITTTR, Kolkata, India
- 100. Coordinated Computer Application and Networking, Dec 09-13, 2019, NITTTR, Kolkata, India

- 101. Coordinated STTP Problem Based Learning, Dec 02-06, 2019, NITTTR ICT, Kolkata, India
- 102. Coordinated STTP Computer Application and Networking, Nov 25-29, 2019, NITTTR, Kolkata, India
- 103. Coordinated STTP Introduction to PYTHON Programming, 18-22, November, 2019, NITTTR, Kolkata, India
- 104. Coordinated STTP Computer Application and Networking, Nov 11-15, 2019, NITTTR, Kolkata, India
- 105. Coordinated STTP Numerical Methods: Theories and Applications, 04-08, November, 2019, NITTTR Kolkata Bhubaneswar Extn., India
- 106. Acted as Resource Person at STTP Topics in Data Structures and Algorithms, October 14 25, 2019, NITTTR Kolkata, India
- 107. Coordinated STTP Computer Application and Networking, Sept. 09-14, 2019, NITTTR, Kolkata, India
- Coordinated STTP Recent Trends in Optimization: Theory and Applications, 02-06, September, 2019, NITTTR, Kolkata, India
- 109. Acted as Resource Person at STTP Basics of Computer, IT and ITes, July 15 26, 2019, NITTTR Kolkata, India
- 110. Coordinated STTP Problem Solving with SCILAB, June 24- July 5, 2019, NITTTR, Kolkata, India
- 111. Coordinated STTP Office Automation and Management, June 17-21, 2019, NITTTR, Kolkata, India
- 112. Coordinated STTP Problem Based Learning, May 20-31, 2019, NITTTR ICT, Kolkata, India
- 113. Coordinated STTP Numerical Methods: Theories and Applications, April 29 May 3, 2019, NITTTR, Kolkata, India
- 114. Event Coordinator of National Innovation Talent Contest for Polytechnic (NITCP-II), 23-24 February, 2019, NITTTR, Kolkata
- 115. Coordinated STTP Discrete Mathematics, 11-15 February, 2019, NITTTR, Kolkata, India
- 116. Coordinated STTP Introduction to LaTeX, 25-30 October, 2018, Dibrugarh University, Dibrugarh, Assam, India
- 117. Coordinated STTP Mathematics & Computation, 31 Dec- 11, Jan, 2019, NITTTR, Kolkata, India
- 118. Coordinated STTP Problem Solving with SCILAB, 01-12 October, 2018, NITTTR, Kolkata, India
- 119. Coordinated STTP Office Management Tools, 13-17 August, 2018, Govt. Polytechnic, Ranchi, Jharkhand, India
- 120. Coordinated STTP Problem Based Learning, 04-15 June, 2018, NITTTR, Kolkata, India
- 121. Coordinated STTP Topics in Discrete Mathematics, 27-31 August, 2018, NITTTR, Bhubaneswar, India
- 122. Coordinated STTP Research Methodology in Engg. and Technical Writing using LaTeX, 18-30 Dec, 2017, NITTTR, Kolkata, India
- 123. Coordinated STTP Numerical and Statistical Methods for Technical Teachers with SCILAB, 11-15 Sept., 2017, NITTTR, Kolkata, India
- 124. Coordinated STTP Exposure on SCILAB, 19-30 June, 2017, NITTTR, Kolkata, India
- 125. Coordinated STTP Discrete Mathematics and It's Applications, 16-20 January, 2017, NITTTR, Kolkata, India

- 126. Co-Coordinated National Innovation Talent Contest for Polytechnic (NITCP I), 21-22 February, 2017, NITTTR, Kolkata
- 127. Coordinated STTP SCILAB and Gnuplot for Engineers and Researchers, 12-16 December, 2016, NITTTR, Kolkata, India
- 128. Coordinated STTP Mathematical and Technical Writting in Latex, 26-30 December, 2017, NITTTR, Kolkata, India
- 129. Coordinated STTP Recent Advances in Optimization: Theory and Applications, 27 June-1 July, 2016, NITTTR, Kolkata, India
- 130. Coordinated STTP Numerical and Computational Techniquesfor Engineers and Researcher, 13-17 June, 2017, NITTTR, Kolkata, India

### LIST OF FDPs/WORKSHOPs/CONFERENCEs/SEMINARs PARTICIPATED/ATTENDED

- 1. Participated 12th International Conference on Soft Computing for Problem Solving (SoCProS 2023), August 11 13, IIT Roorkee, India
- 2. Participated **One week FDP on Data Science using R**, July 17 21, 2023, NITTTR Chandigarh, India
- 3. Participated **One week FDP on Data Science in Engineering**, June 05 09, 2023, NITTTR Kolkata, India
- 4. Participated **One week FDP on Advanced Pedagogy**, May 22 June 02, 2023, NITTTR Kolkata, India
- 5. Participated **One week FDP on Open Source Tools for Research**, May 15 19, 2023, NITTTR Chandigarh, India
- 6. Participated **One week FDP on Cyber Crime and Forensic Tools**, May 08 12, 2023, NITTTR Chandigarh, India
- 7. Participated One Week Short Term Course on Recent Industrial trends in Control and Optimization (RICO-2023), May 01 05, 2023, NIT Jalandhar, India
- 8. Participated One week FDP on Applications of Technology in Environmental Sustainability, April 17 21, 2023, NITTTR Chandigarh, India
- 9. Participated **10th National Seminar on Ancient Indian Science and Technology**, August 21, 2021, NITTTR Kolkata, India
- 10. Participated **7th Regional Workshop on Technical Education for N.E. States**, August 16, 2021, NITTTR Kolkata, India
- 11. Participated National Workshop (web) on Prospective of Entrepreneurship for North Eastern States, June 19, 2021, NITTTR Kolkata, India
- 12. Participated Online Regional Program on Developing Context Based Vocational Pedagogy, April 26 30, 2021, CPSC, Manila, Philippines
- 13. Participated International Conference on Artificial Intelligence and Sustainable Engineering (AISE 2020), January 18 20, 2021, NIT Goa, India
- 14. Participated International Conference (web) on Recent Trend in Advanced Computing (ICRTAC AIT 2020), December 17 18, 2020, VIT Chennai, India
- 15. Attended **National Seminar(web) on Advances in Machining**, September, 2020, NITTTR Kolkata, India
- 16. Participated Capacity Building Programme Capacity Building Programme Creative Problem Solving, Innovation and Meaningful R & D 10-14 August, 2020 Organized by NITTTR, Chandigarh, India

- 17. Participated 3rd National Seminar(web) on Ancient Indian Science and Technology, July 13, 2020, NITTTR Kolkata & SPIU Uttar Pradesh, India
- 18. Participated Inter Capacity Building Training Programme Module 5: Technology Enabled Learning and Lifelong Self-Learning, June 8 -12, 2020, by NITTTR Chennai, India
- 19. Participated Capacity Building Training: Instructional Planning and Delivery, Feb 17-21, 2020, Conducted by NITTTR Bhopal, India
- 20. Participated IWAML-2019, 04-08 February, 2019, NITTTR, Kolkata, India
- 21. Participated RETCO-III, 05-07 June, 2017, IIST, Thiruvananthapuram, India
- 22. Participated TIARA Summer School on Numerical Astrophysics, 13-17 July, 2015, TIARA, Academia Sinica, Taiwan
- 23. Participated ASROC Annual Meeting, 22-24 May, 2015, Yilan University, Taiwan
- 24. Participated **5th Fermi Asian Network (FAN) Workshop**, July 28 Aug 1, 2014, NCTA, Yilan, Taiwan
- 25. Participated ASROC Annual Meeting, 23-25 May, 2014, NTU Experimental Forest, Nantou, Taiwan
- 26. Participated Accretion Onto Black Holes: A topical Conference, 5-7 Sept., 2013, International Centre Goa, Dona Paula, Goa, India
- 27. Participated National Conference on Recent Trends in the Study of Compact Objects: Theory and Observation, 11 13 March 2013, IITG, Guwahati, India
- 28. Participated East Asia Numerical Astrophysics Meeting (EANAM5), Oct 28- Nov 2, 2012, YITP, Kyoto University, Kyoto, Japan
- 29. Participated 39th COSPAR Scientific Assembly, 14-22 July, 2012, Infosys Campus, Mysore, India
- 30. Participated The Thirteenth Marcel Grossmann Meeting MG13, 1-8 July, 2012, Stockholm University, Stockholm, Sweden
- 31. Participated International Conference on Astrophysics & Cosmology, March 1921, 2012, Tribhuvan University, Kathmandu, Nepal
- 32. Participated International School and Conference on Analytical and Computational Astrophysics, Nov 14-25, 2011, ICTP, Trieste, Italy.
- 33. Attended First Kolkata Workshop on Role of Small Telescopes in Modern Astronomy Research, 7th-8th November, 2011, Kolkata, India
- 34. Participated International Conference on Wideband X-ray Astronomy: Frontiers in Timing and Spectroscopy, January 13-16, 2011, IUCAA, Pune, India.
- 35. Participated International Conference on Accretion and Outflow in Black Hole Systems, October 10-15, 2010, Kathmandu, Nepal
- 36. Attended Symposium on Developments in Space Research in the Last 25 Years,16th November, 2008, Indian Centre for Space Physics, Kolkata, India
- 37. Participated First International Conference on Science with Very Low Frequency Radio Waves, March 13-18, 2010, Kolkata, India
- 38. Participated International Conference on Observational Evidence for Black Hole in the Universe, February 10-15, 2008, Kolkata, India
- 39. Attended National Conference on Uncertainty: A Mathematical Approach, An UGC Sponsored National Conference, September 7-8, 2006, Burdwan, West Bengal, India
- 40. Participated Bose Fest, 2008, 2009, 2010, 2011, 2012 & 2013 at S. N. Bose National Centre for Basic Sciences, Kolkata, India

## Important Administrative/Management Experiences

- 1. Nodal Officer of NITTTR Kolkata, Since Feb 2025, NITTTR Kolkata (Present)
- 2. Chief Information Security Officer (CISO) of NITTTR Kolkata, Since Feb 2025, NITTTR Kolkata (Present)
- 3. Coordinator, Ancient Indian STEM Cell of NITTTR Kolkata, Since Feb 2025, NITTTR Kolkata (Present)
- 4. Hostel Warden Sept 2021 Jan 2025, NITTTR Kolkata (Present)
- 5. Faculty in Charge (FIC), Time Table, NITTTR Kolkata (Past)
- 6. Faculty in Charge (FIC), Linux Lab, NITTTR Kolkata (Past)
- 7. Faculty in Charge (FIC), Student Affairs, NITTTR Kolkata (Past)
- 8. State Cordinator, Mizoram, NITTTR Kolkata (Past)
- 9. Co-Faculty in Classroom (Co-FIC), T & P, NITTTR Kolkata (Past)
- 10. **Served and Serving Member Secretaries and Members** of Various Internal Committee of NITTTR Kolkata (Past & Present)

## Serving as Reviewer/Editorial Board Member of Important Journals

- 1. Expert System with Application, SCI Impact Factor: 7.5, Elsevier
- 2. Information Processing and Management, SCI Impact Factor: 7.4, Elsevier
- 3. IEEE Transactions of Artificial Intelligence, SCI Impact Factor: 5.94, IEEE
- 4. Neurocomputing, SCI Impact Factor: 5.5, Elsevier
- 5. Heliyon, SCI Impact Factor: 3.4, Cell Press
- 6. Astronomy and Computing, SCI Impact Factor: 1.9, Elsevier
- 7. Scientia Iranica, SCI Impact Factor: 1.4, Sharif University of Technology
- 8. Computers, Materials and Continua, SCI, Tech Science Press
- 9. Machine Learning with Application, SCI, Elsevier
- 10. TELCOMNIKA, SCI, Universitas Ahmad Dahlan (UAD)
- 11. IJEECS, Scopus, Institute of Advanced Engineering and Science (IAES)

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