

Curriculum Vitae



Dr. Rajib Bag
Principal

Department : Physics

Educational Qualification: M.Sc.(Physics), M.Tech.(IT), Ph.D (Engg.)

Specialization: Electronics, Courseware Engineering, Biomedical Control

Area of Research: Signal Correction Techniques in biomedical Control Systems, Image Processing – Digital Image Filtering and Image Enhancement Techniques, Pattern Recognition, Education Technology – Intelligent Tutoring System (ITS), Student Modeling - Adaptive Learning & personalization, Data Science - Machine Learning & Deep Learning Techniques in Sentiment Analysis, IOT Security, Nano Science - Energy Harvesting with Nano Materials

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Experiences:

Teaching – 20 Years

Administrative - 17 Years

Publications:

Refereed	International	National	Total
Journal	32	02	34
Conference Proceedings	08	07	15
Edited Vol./ Book Chapter	15	-	15
Patent	--	03	03
Book	02	-	02
Total	57	12	69

BOOK PUBLICATIONS:02

1. [2020 Textbook] Atanu Das, Rajib Bag, **Digital Pedagogy with ICT and Learning Technologies**, ISBN: 978-93-89688-47-4, Pub: CBS Publishers, MRP: ₹575, Pages: 226, March, 2020.
2. [2019 Monograph] Rajib Bag, **Atanu Das, Signal Correction Techniques for Biomedical Control Systems**, ISBN13: 978-620-0-21522-2, Pub: LAP LAMBERT Academic Publishing, Germany, Published on: 11 Jun, 2019, MRP: 76.90€, Pages: 218.

LIST OF PUBLISHED & ACCEPTED PAPERS:

QUALITY REFEREED JOURNAL [WEB OF SCIENCE (SCI-E, E-SCI), SCOPUS]:19

1. [2023] Koyel Chakraborty, Siddhartha Bhattacharyya*, Rajib Bag, Leo Mrs`ic´, “Sentiment analysis on labeled and unlabeled datasets using BERT architecture” , Application of Soft Computing, <https://doi.org/10.1007/s00500-023-08876-5>, Published online: 9 July,2023, **Springer. [SCI], IF: 3.73**
2. [2022] Aritra Bandyopadhyay, Kaustuv Deb, Avishek Chakraborty*, Atanu Das, **Rajib Bag** “A Neighborhood Impact Driven K-Medoid Clustering and Fuzzy Logic Blended Approach for High Density Impulse Noise Detection and Removal” *Traitement du Signal*, DOI: <https://doi.org/10.18280/ts.390532>, Vol. 39, No. 5, October, 2022, pp. 1737-1749. [**SCIE, SCOPUS**]. **I.F: 1.9**
3. [2021] Shubhendu Banerjee*, Sumit Kumar Singh, Avishek Chakraborty, Sharmistha Basu, **Atanu Das**, Rajib Bag, “Diagnosis of Melanoma Lesion using Neutrosophic and Deep Learning”, *Traitement du Signal*, ISSN / eISSN: 0765-0019 (print); 1958-5608 (online), Vol. 38, No. 5, pp. 1327-1328, November, 2021, Pub: IETA. DOI: 10.18280/ts.380507 [**SCIE, SCOPUS**]. **IF: 2.589**.
4. [2021] Aritra Bandyopadhyay*, Kaustuv Deb, **Atanu Das**, Rajib Bag, "High Density Impulse Noise Removal from Color Images by K-means Clustering based Detection and Least Manhattan Distance-oriented Removal Approach", *International Journal of Advanced Computer Science and Applications (IJACSA)*, ISSN / eISSN: 2053-1583, Volume 12, No 10. October 2021, Pub: IOP Publishing Ltd, DOI: 10.14569/IJACSA.2021.0121067 [**ESCI, SCOPUS**]. **IF: 1.09**.
5. [2020] Shubhendu Banerjee*, Sumit Kumar Singh, AvishekChakraborty, **AtanuDas**, Rajib Bag, “Melanoma Diagnosis Using Deep Learning and Fuzzy Logic”, *Diagnostics*, ISBN: 2075-4418, Aug, 2020, Vol. 10, No. 8, pp. 577-602, Pub: MDPI. [**SCIE, SCOPUS**]. **IF: 2.360**
6. [2020] **Chakraborty, K.**, Bhatia, S., Bhattacharyya, S., Platos, J., Bag, R., & Hassaniien, A. E. (2020). Sentiment Analysis of COVID-19 tweets by Deep Learning Classifiers—A study to show how popularity is affecting accuracy in social media. *Applied Soft Computing*, 106754 (**SCI Journal Impact Factor - 6.030**)
7. [2020]Shubhendu Banerjee, Sumit Kumar Singh*, **Atanu Das**, Rajib Bag, “Recognition of Hindi and Bengali Handwriting and Typed Text from Images using Tesseract on Android Platform”, *International Journal of Advanced Science and Technology*,ISSN: 2005-4238 (Print), 2207-6360 (Online), Vol. 29, No. 4, pp. 4042-4054, Pub: SERSC Journals. [**SCOPUS**]**IF: 0.410**
8. [2020]AritraBandyopadhyay*, Kaustuv Deb, Atanu Das, Rajib Bag, Impulse Noise Removal by K-Means Clustering Identified Fuzzy Filter – A New Approach, *Turkish Journal of Electrical Engineering & Computer Sciences*, ISSN: 1300-0632, E-ISSN: 1303-6203, Available online:, 19 May, 2020, DOI: 10.3906/elk-1910-34, Vol. 28, No. 5, Pub: The Scientific and Technological Research Council of Turkey, [**SCIE, SCOPUS**]. **IF: 0.682**
9. [2019] Rudra Prasad Chatterjee, Kaustuv Deb, Sonali Banerjee, **Atanu Das***, Rajib Bag, “Web Mining Using K-Means Clustering and Latest Substring Association Rule for E-Commerce”, *Journal of Mechanics of Continua and Mathematical Science (JMCMS)*, ISSN: 0973-8975 (Print), 2454-7190 (Online), Vol. 14, No. 6, pp. 28-44, Nov-Dec 2019, DOI:10.26782/jmcms.2019.12.00003, Pub: IMCMS. [**ESCI**]. **IF:2.8191**

10. [2019] **K. Chakraborty**, S. Bhattacharyya and R. Bag, "A Survey of Sentiment Analysis from Social Media Data," in *IEEE Transactions on Computational Social Systems*, vol. 7, no. 2, pp. 450-464, 2019, doi: 10.1109/TCSS.2019.2956957. (**IEEE Transaction Impact Factor - 3.290**)
11. [2019] **Koyel Chakraborty**, Sudeshna Sani, Rajib Bag, "A study on sentiment polarity identification of indian multilingual tweets through different neural network models", *Journal Of Mechanics Of Continua And Mathematical Sciences*, ISSN (Online) : 2454 -7190 Vol.-15, No.-1, January (2020) pp 108-117 ISSN (Print) 0973-8975, (**ESCI Indexed Journal Impact Factor 2.8191**)
12. [2019] Kaustuv Deb*, Rudra Prasad Chatterjee, Sonali Banerjee, Rajib Bag, **Atanu Das**, "Educational Website Ranking Using Fuzzy Logic and K-Means Clustering based Hybrid Method", *Ingénierie des Systèmes d'Information (ISI)*, ISSN: 1633-1311 (print); 2116-7125 (online), Vol. 24, No. 5, pp. 497-506, October 2019, Pub: IETA, Canada. DOI:10.18280/isi.240506. [**SCOPUS**]. **IF:0.33**
13. [2019] Kaustuv Deb*, Sonali Banerjee, **Atanu Das** and Rajib Bag, "Tutorial Gap Identification towards Student Modeling using Fuzzy Logic", *Int. Journal of Information and Communication Technology Education (IJICTE)*, ISSN: 1550-1876 (Print), 1550-1337 (Online), Vol. 15, Issue 3, pp. 30-41, DOI: 10.4018/IJICTE.2019070103, Pub: IGI-GLOBAL. [**ESCI, SCOPUS**]. **IF: 0.31**
14. [2019] Shubhendu Banerjee*, Sumit Kumar Singh, Atanu Das, **Rajib Bag**, "Recognition of English Handwriting and Typed Text from Images using Tesseract on Android Platform", *Advances in Electrical and Computer Engineering*, ISSN: 1582-7445, e-ISSN: 1844-7600,), Vol. x, No. x, pp. 000–000, Accepted on 11 Jun 2019, Communicated on 10 Mar 2019, Submission ID: 6738, Pub: Stefan Cel Mare University of Suceava - Romania [**SCIE, SCOPUS**].
15. [2019] Santanu Kumar Sen, Sharmistha Dey, **Rajib Bag**, "Study of Energy Efficient Algorithms for Cloud Computing based on Virtual Machine Migration Techniques, International Journal of Machine Learning and Networked Collaborative Engineering(IJMLN,CE), Vol. 03, No. 2, (2019),093-101, ISSN:2581-3242, pp. 93-101, DOI : <https://doi.org/10.30991/IJMLNCE.2019v03i02.003>.
16. [2018] Shubhendu Banerjee, Aritra Bandyopadhyay*, **Rajib Bag**, Atanu Das, "Four Directional Detection Based Gaussian Noise Removal", *Lecture Notes in Electrical Engineering (LNEE)*, ISSN: **1876-1100**, ICCACCS-2018, pp.72, (23-24 Nov),2018. (<https://www.springer.com/gp/book/9789811386862>). Pub.: Springer [**SCOPUS**].
17. [2017] Atanu Das, Kaustuv Deb*, Sonali Banerjee and **Rajib Bag**, "A New Method for Tutorial Gap Identification towards Students Modelling", *Mathematical Modelling of Engineering Problems (MMEP)*, ISSN 2369-0739 (Print), 2369-0747 (Online), Vol. 4, No. 2, pp. 80-83, June, 2017, Pub: IETA, Canada. DOI: 10.18280/mmep.040203. [**SCOPUS**].
18. [2017] Shubhendu Banerjee*, Aritra Bandyopadhyay, Avik Mukherjee, Atanu Das, **Rajib Bag**, "Random Valued Impulse Noise Removal using Region Based Detection Approach", *Engineering, Technology & Applied Science Research (ETASR)*, ISSN: 1792-8036 (Online), 2241-4487 (Print), Vol. 7, No. 6 (Dec 2017), pp. 2288-2292, Pub: EOS ASSOC, DOI:10.5281/zenodo.1118986. [**ESCI**].
19. [2006] Achintya Das, **Rajib Bag**, N. G. Nath, "A modification to realize dead-beat performance of control systems - signal correction technique", *IEEE Transaction on Instrumentation and Measurement*, Vol. 55, No. 5, pp. 1546-1550, October 2006. **Impact Factor: 0.572.[SCI]**

REFEREED INDEXED PAID JOURNAL: 7

20. [2012] **Rajib Bag**, Achintya Das & D.N. Tibarewala, “Signal Correction Technique (SCT) Application for the control of Blood Sugar level of Living Body”, *International Journal of Engineering, Science and Technology (IJEST)*, Vol. 4 No. 01., January 2012, ISSN: 0975 – 5462.
21. [2011] **R. Bag**, A. Das, D. N. Tibarewala, “Regulation of Pupil Aperture of Human Eye – Signal Correction Technique”, *International Journal of Engineering, Science and Technology (IJEST)*, Vol.3, No.5, pp. 3764-3770, ISSN: 0975-5462, May, 2011.
22. [2011] **Rajib Bag**, Achintya Das, D. N. Tibarewala, “Design of nonlinear system with saturation Determining required signal for application as additional input”, *International Journal of Computer Applications in Engineering, Technology and Science (IJ-CA-ETS)*, Vol.-3, Issue 2, No.-32, pp. 158-162, ISSN: 0974-3596, April-Sep 2011. **Impact Factor: 1.908.**
23. [2011] **Rajib Bag**, Achintya Das & D. N. Tibarewala, “Signal Correction Technique (SCT) to realize dead beat performance of control system”, *International Journal of Advanced Engineering & applications (IJAEA)*, Vol.-1, pp. 47-50, ISSN : 0975 – 7783, January, 2011. **Impact Factor: 0.814.**
24. [2010] Atanu Das*, **Rajib Bag**, “An Improved Medical Image Registration Method using Curvelet Transform and Genetic Algorithm”, *Int. Journal of Computer Applications in Engineering Technology and Sciences (IJ-CA-ETS)*: ISSN 0974-3596, Vol. 3, Issue 1, pp. 152-157, October, 2010, Pub: IJ-CA-ETS. **[Indexed Paid Journal]**
25. [2010] Atanu Das*, **Rajib Bag**, “Wireless Sensor Network Based Monitoring Systems: A Review and State-of-the-art Applications”, *Int. Journal of Computer Applications in Engineering Technology and Sciences (IJ-CA-ETS)*: ISSN 0974-3596, Vol. 3, Issue 1, pp.142-151, October, 2010, Pub: IJ-CA-ETS. **[Indexed Paid Journal]**
26. [2010] **Rajib Bag**, Atanu Das*, “Developing an Intelligent Tutoring System following Bayesian Approach”, *Int. Journal of Advanced Engineering & Applications (IJAEA)*, ISSN 0975–7783 (Print), 0975–7791 (Online), Vol. 2, pp. 114-119, June Issue, 2010, available at <http://steps-india.com/ijaea/ijaea-june2.htm>, Pub: Index Copernicus sp. z o.o. **[Indexed Paid Journal]**

REFEREED INDEXED NON-PAID JOURNAL: 8

27. [2018] Kaustuv Deb*, Rudra Prasad Chatterjee, Sonali Banerjee, **Rajib Bag**, Atanu Das, “Mobile Phone Ranking by Analytical Hierarchical Process: A Case Study”, *Int. Journal of Information Engineering and Electronic Business (IJIEEB)*, Vol. 10, No. 6, pp.52-60, ISSN: 2074-9023 (Print), ISSN: 2074-9031 (Online), DOI: 10.5815/ijieeb, Pub.: MECS Press. DOI: 10.5815/ijieeb.2018.06.06 **[Indexed Non-Paid Journal]**.
28. [2016] Shubhendu Banerjee*, Arijit Taraphdar, **Rajib Bag**, and Atanu Das, "Binary expansion based denoising algorithm for an image corrupted by Gaussian noise," *CSI Transactions on ICT*, ISSN: 2277-9078 (Print), 2277-9086 (Online), Special Issue ICAC-2016 of CSIT, pp. 1-5, 2016. Pub: Springer, DOI:10.1007/s40012-016-0151-7. **[UGC Approved Journal]**.
29. [2015] Aritra Bandyopadhyay*, Minu Kumari, Pooja, Atanu Das, **Rajib Bag**, “Detection and Removal of High Density Random Valued Impulse Noise”, *CiiT Int. Journal of Digital Image Processing*, Print-ISSN: 0974-9691, Online-ISSN 0974-9586, Vol. 7, No. 8, pp. 242-246, Aug, 2015, Pub: CiiT. **[Indexed Non-Paid Journal]**
30. [2015] Aritra Bandyopadhyay*, Shubhendu Banerjee, **Rajib Bag**, Atanu Das, “A Re-look and Renovation over State-of-the-Art Salt and Pepper Noise Removal Techniques”, *Int. Journal of Image, Graphics and Signal Processing*, ISSN: 2074-9074 (Print), 2074-9082 (Online), Vol. 7, No. 9, pp. 61-69, August 2015. Pub: MECS Press. **[UGC Approved Journal]**
31. [2015] Shubhendu Banerjee*, Aritra Bandyopadhyay, **Rajib Bag**, Atanu Das, “Moderate Density Salt & Pepper Noise Removal”, *Int. Journal of Electronics and Communication Technology, (IJECT)*, ISSN: 2230-

7109 (Online), 2230-9543 (Print), Vol. 6, Issue 1, Spl-1, pp. 44-48, Jan - March 2015. Pub: Cosmic Journal.
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32. **[2014]** Shubhendu Banerjee, Aritra Bandyopadhyay*, **Rajib Bag**, Atanu Das, "Neighborhood Based Pixel Approximation for High Level Salty and Pepper Noise Removal", *CiiT Int Journal of Digital Image Processing*, Print-ISSN: 0974-9691, Online-ISSN 0974-9586, Vol. 6, Issue: 8, pp. 346-351, September, 2014, Pub: CiiT.
[Indexed Non-Paid Journal]
33. **[2004]** **Rajib Bag**, Atanu Das, S. C. Biswas, P. Kar, "An automated on line stroke volume measurement from arterial pressure contour analysis" *Calcutta Medical Journal (CMJ)*, Vol.101, No.5, Issue: September-October, 2004.
34. **[2003]** Das, S. C. Biswas, A. K. Banerjee and **Rajib Bag**, "Myocardial Function and its contractile power in dilated cardio myopathy", *Calcutta Medical Journal (CMJ)*, Vol. 100, No.3, Issue: May-June 2003.

IN REFEREED EDITED VOLUMES / BOOK CHAPTERS: 15

1. **[2021]** Kaustuv Deb, Sonali Banerjee, **Atanu Das**, Rajib Bag, "Programming Performance Prediction Using Decision Tree Classifiers" in Proc. of International Conference on Future Trends and Technological Advancement in Engineering-2020 (ICFTTAE-2020), Part – II, edited by S, Chabri, et. al., ISBN: 978-81-950351-2-0, Pub: New Delhi Publishers.
2. **[2021]** Sonali Banerjee, Kaustuv Deb, **Atanu Das**, Rajib Bag, "Skill Oriented Career Goal Recommendation Using Fuzzy Assignment Problem" in Proc. of International Conference on Future Trends and Technological Advancement in Engineering-2020 (ICFTTAE-2020), Part – II, edited by S, Chabri, et. al., ISBN: 978-81-950351-2-0, Pub: New Delhi Publishers.
3. **[2021]** Joy Chatterjee*, **Atanu Das**, Sayon Ghosh, Manab Kumar Das and Rajib Bag, "A Review on Security and Privacy Concern in IoT Health Care", in edited book – Internet of Things for Healthcare Technologies, by Chinmay Chakraborty et. al., ISBN: 978-981-15-4111-7, DOI: 10.1007/978-981-15-4112-4_12, pp 247-271, Vol 73, Pub: **Springer**, 2021.
4. **2020]** Joy Chatterjee*, **Atanu Das**, Sayon Ghosh, Manab Kumar Das and Rajib Bag, "Cyber Attack Analysis and Security Aspect of IoT Enabled Technologies", in edited book - IoT: Security and Privacy Paradigm, by Souvik Pal, Vicente GarcíaDíaz, Dac-Nhuong Le, Pub: **CRC Press, Taylor & Francis** Group pp. 159-192, June 1, 2020, ISBN 9780367253844, <https://www.crcpress.com/IOT-Security-and-Privacy-Paradigm/Pal-Diaz-Le/p/book/9780367253844>
5. **[2019]** Sonali Banerjee, **Atanu Das**, Rajib Bag, "A Survey on Use of Adaptive Learning Techniques towards Learning Personalization," in edited volume *Handbook of Research on Modern Educational Technologies, Applications, and Management* by Mehdi Khosrow-Pour D.B.A., pp. 790-808, DOI:10.4018/978-1-7998-3476-2, July, 2020, Pub: **IGI-GLOBAL**. <https://www.igi-global.com/book/handbook-research-modern-educational-technologies/242895>.
6. **[2018]** **Koyel Chakraborty**, Siddhartha Bhattacharyya, Rajib Bag, and AboulAlla Hassanien "Sentiment Analysis on a Set of Movie Reviews Using Deep Learning Techniques," In *Social Network Analytics – Computational Research Methods and Techniques*. Elsevier Inc.(2018) ISBN: 9780128154588 (**Elsevier Book Chapter**)

7. [2018] Shubhendu Banerjee, Aritra Bandyopadhyay*, **Rajib Bag**, Atanu Das, "Four Directional Detection Based Gaussian Noise Removal", *Lecture Notes in Electrical Engineering (LNEE)*, ISSN: 1876-1100, ICCACCS-2018, pp.72, (23-24 Nov),2018. (<https://www.springer.com/gp/book/9789811386862>). Pub.: Springer [SCOPUS]. Book Chapter
8. [2018]**Koyel Chakraborty**, Rajib Bag, Siddhartha Bhattacharyya, "Relook into Sentiment Analysis performed on Indian Languages using Deep Learning", *International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)*, IEEE, November 22-23, 2018.
9. [2017]**Atanu Das**, Kaustuv Deb*, Sonali Banerjee and Rajib Bag, "A New Method for Tutorial Gap Identification towards Students Modeling," *Proc. of Int. Conf. on Advances in Science and Technology 2017*, ISBN: 978-1-945919-47-3, pp. 318-321, 17-19 March, 2017, MCKV Institute of Engg, Kolkata, India, Pub: Mudranik Technologies Pvt. Ltd.
10. [2016] Shubhendu Banerjee, AritraBandyopadhyay*, Rajib Bag, **Atanu Das**, "A Deviation Based Identification of Random Valued Impulse Noise Towards Image Filtering Using Neighborhood Approximation", 3rd Int. Conf. on Foundations and Frontiers in Computer, Communication and Electrical Engineering (C2E2-2016), Edited by A. Acharya, 15th-16th January, 2016 at SKFGI, Mankundu, Hooghly, WB, INDIA, pp.217-220, Print ISBN: 978-1-138-02877-7, eBook ISBN: 978-1-315-65791-2, DOI: 10.1201/b20012-46, Pub: CRC Press(Taylor- Francis Group). [SCOPUS]
11. [2016] AritraBandyopadhyay*, KoyelChakraborty, **Atanu Das**, Rajib Bag, "High Density Salt and Pepper Noise Removal by Selective Mean Filter", Proc. of 3rd Int. Conf. on Foundations and Frontiers in Computer, Communication and Electrical Engineering (C2E2-2016), Edited by A. Acharya, 15th-16th January, 2016 at SKFGI, Mankundu, Hooghly, WB, INDIA, pp. 191-194, Print ISBN: 978-1-138-02877-7, eBook ISBN: 978-1-315-65791-2, DOI:10.1201/b20012-41, Pub: CRC Press(Taylor- Francis Group). [SCOPUS]
12. [2016] Sonali Banerjee*, Rajib Bag, **Atanu Das**, "Design and Development of a Web Based Teaching Performance Assessment Tool with Student Feedback and Fuzzy Logic", 3rd Int. Conf. on Foundations and Frontiers in Computer, Communication and Electrical Engineering (C2E2-2016), Edited by A. Acharya, 15th-16th January, 2016 at SKFGI, Mankundu, Hooghly, WB, INDIA, pp.475-479, Print ISBN: 978-1-138-02877-7, eBook ISBN: 978-1-315-65791-2, 2016, DOI:10.1201/b20012-93. Pub: CRC Press (Taylor-Francis Group). [SCOPUS]
13. [2016]Shubhendu Banerjee*, ArijitTaraphdar, Rajib Bag, and Atanu Das, "Binary expansion based denoising algorithm for an image corrupted by Gaussian noise," *CSI Transactions on ICT*, ISSN: 2277-9078 (Print), 2277-9086 (Online), Special Issue ICAC-2016 of CSIT, pp. 1-5, 2016. Pub: **Springer**, DOI:10.1007/s40012-016-0151-7. Selected papers of International Conference of Advanced Computing (ICAC-2016), 26th - 27th October, 2016, Organized by: MaulanaAbulKalam Azad University of Technology, West Bengal,
14. [2015] Shubhendu Banerjee*, AritraBandyopadhyay, Rajib Bag, **Atanu Das**, "Moderate Density Salt & Pepper Noise Removal", *Int. Journal of Electronics and Communication Technology, (IJECT)*, ISSN: 2230-7109 (Online), 2230-9543 (Print), Vol. 6, Issue 1, Spl-1, pp. 44-48, Jan - March 2015. Pub: Cosmic Journal. 2ndInt. Conf. on "Foundations & Frontiers in Computer, Communications and Electrical Engineering (C2E2-2015)", Organized jointly by Supreme Knowledge Foundation Group of Institutions (SKFGI) on 9th-10th January, 2015 at Mankundu, Hooghly, WB, INDIA.
15. [2015] Shubhendu Banerjee, AritraBandyopadhyay*, Rajib Bag, **Atanu Das**, "Sequentially Combined Mean-Median Filter for High Density Salt & Pepper Noise Removal", **2015 IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN)**, Edited by Dr. Siddhartha Bhattacharyya et.al., 20-22 Nov, 2015, RCCIIT, Kolkata, India, pp. 21-26, DOI: 10.1109/ICRCICN.2015.7434203 Online-ISBN: 978-1-4673-6735-6 CD-ROM ISBN: 978-1-4673-6734-9, Pub: **IEEE Xplore** Digital Library. [SCOPUS].

International:

01. [2021] Koyel Chakraborty*, Siddhartha Bhattacharyya, Rajib Bag, "A Three-Step Fuzzy based BERT Model for Sentiment Analysis" Third Doctoral Symposium on Intelligence Enabled Research (DoSIER 2021), Nov 12-13,2021, Cooch Behar Govt. Engg. College in association with Acuminous Research Foundation(AcuminoR).
02. [2020] Aritra Bandyopadhyay*, Kaustuv Deb, **Atanu Das**, Rajib Bag, "Random valued impulse noise detection using fuzzy C-means clustering technique", Paper ID:138, 4thInternational Conference on Smart Computing and Informatics (SCI-2020), 10-11October, 2020, Vasavi College of Engineering(Autonomous), Hyderabad, Telangana, India, <https://vce.ac.in/icsci/index.html>. (Accepted on 19th Sept, 2020).To appear in Smart Innovation Systems and Technologies Series, Springer.
03. [2020] AritraBandyopadhyay*, Kaustuv Deb, **Atanu Das**, Rajib Bag, "Manhattan distance based nearest vicinity guided filter design for high density salt and pepper noise removal", Presentation ID:101, 2020 IEEE International Conference for Convergence in Engineering, 5-6 September,2020, NetajiSubhash Engineering College, Kolkata, India, <https://www.icce2020.in/>. To appear in IEEE Xplore digital library.
04. [2020]Joy Chatterjee*, SayonGhosh, Manab Kumar Das, **Atanu Das** and Rajib Bag, "A New Analytical Approach For Smart Retail Shopping Using IoT",Proc. of International Conference on Future Trends and Technological Advancement in Engineering-2020(ICFTTAE-2020), pp. 69, Jan 31-Feb 01, 2020, NIT-Agarpara, Kolkata, India. [Papers will appear in a Book with ISBN No.].
05. [2019] Santanu Kr. Sen, Sharmistha Dey, **Rajib Bag**, "A comparative study of predictive analytics models used for customer arrival forecasting in hotels" International Conference on Frontiers in Engineering, Management and Applied Science (FEMAS-2019), FEMAS-2019, GNIT, Sodepur, Kolkata, India, 26-27th September 2019.
06. [2018] Koyel Chakraborty, Siddhartha Bhattacharyya, **Rajib Bag**, and Aboul Alla Hassanien*, "Comparative Sentiment Analysis On a Set of Movie Reviews Using Deep Learning Approach," AMLTA 2018, Egypt, Cairo, 22-24 Feb, 2018 Springer, pp. 311-318.
07. [2018] **Koyel Chakraborty**, Rajib Bag, Siddhartha Bhattacharyya, "Relook into Sentiment Analysis performed on Indian Languages using Deep Learning", *International Conference* on Research in Computational Intelligence and Communication Networks (ICRCICN), IEEE, November 22-23, 20
08. [2017] R. P. Chatterjee*, C. Ray, and **R.Bag**, "A comparative study on Latest Substring Association Rule Mining and Hidden Markov Model," International Conference on Computer, Electrical & Communication Engineering, IEEE, Dec, 2017.

National:

09. [2003] Achintya Das, **Rajib Bag***, A. Bhattacharyya and M. Phakhira, "Phase Plane presentation of an under damped control system" Proceedings of National Conference on Recent Trends in Manufacturing (CARTM-2003), pp. 419-423, Nov 14-15, 2003, Kalyani Govt. Engg. College, Nadia, W.B.
10. [2001] N. G. Nath, **Rajib Bag***, Achintya Das, "Signal Correction Technique in a Nonlinear Control System", Proceedings of the Conference on Intelligent Computing and VLSI ,16-17 February 2001, pp. 217-219, Kalyani Govt. Engg. College, Nadia, W.B.
11. [2001] N. G. Nath, **Rajib Bag***, A. Das, "A Technique in Modifying the Performance of Control Systems - Signal Correction Technique", Proceedings of 25th National Systems Conference(NSC 2001) on Systems Engineering Approach to Sustained Growth,13-15 December 2001, pp. 130-132, Dept. of Electrical & Electronics Engg., PSG College of Technology, Coimbatore.

12. [2001] N.G. Nath*, **Rajib Bag**, Achintya Das, "Computer Simulation Study of Arterial Circulation Process" Millenium Conference, Indian Society of Biomechanics, March, 17-18, 2001, Gopalpur-on-sea, Berhampur, Orissa.
13. [2000] N. G. Nath*, **Rajib Bag**, Achintya Das, "Signal correction technique in a control system with saturation nonlinearity", proceedings at 24th National System Conference (NSC 2000), December 7-9, 2000, ISRO Satellite Centre, Department of Space, Bangalore, India.
14. [1999] N.G. Nath, **Rajib Bag***, A. Das, "Modification of system performance - signal correction technique" proceedings of 23rd National System Conference (NSC 1999) on systems Approach to social Engg., pp. 67-68, December 9 - 11, 1999, Institute of technology, Banaras Hindu University, Varanasi, India.
15. [1999] N. G Nath, **Rajib Bag*** & Achintya Das "Signal correction technique in control systems", National Conference (INCURSI 99), February 22-24, 1999, Dept. of Physics, Burdwan University, Burdwan, West-Bengal.

*Corresponding Author (for Journal) & Presenting Author (for Conference Proceedings)

Patents :03

1. [2021] Atanu Das, Chandan Banerjee, **Rajib Bag**, Koyel Chakraborty, "Method and System for Implementing Deep Learning (DL) Techniques for Determining Emotions of Users", *OFFICIAL JOURNAL OF THE PATENT OFFICE - INDIA*, Patent Application Number: 202131042629, Issue No.: 43/2021, Page No: 48678, No. of Pages: 12, No. of Claims: 4, Filing Date: 21st Sep 2021, Publication Date: 22nd October 2021.
2. [2021] Shanmugam Balamurugan, Chandan Banerjee, Atanu Das, **Rajib Bag**, Anuska Sinha, "Sensor-Based Intelligent Digital Nose to Detect and Monitor Blood Sugar Levels of Diabetic Patients Using Machine Learning", *OFFICIAL JOURNAL OF THE PATENT OFFICE - INDIA*, Patent Application Number: 202141042234, Issue No.: 40/2021, Page No: 45010, No. of Pages: 16, No. of Claims: 3, Filing Date: 17th Sep 2021, Publication Date 1st October 2021.
3. [2021] Shubhendu Banerjee, Sumit Kumar Singh, Avishek Chakraborty, Atanu Das, Rajib Bag, " Method for Deploying a Handheld Dermoscopic Tool for Diagonosis of Skin", *OFFICIAL JOURNAL OF THE PATENT OFFICE - INDIA*, Patent Application Number: 202231004658A, Issue No.: 07/2022, Page No: 9497, No. of Pages: 17, No. of Claims: 10, Filing Date: 28th Jan 2022, Publication Date 18st Feb 2022

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Seminar / Conference / Participation Workshop / Refresher Courses / Orientation Courses/

Sl. No	Events	Titles	Organized By	Duration	Nature of Participation	Sponsoring Authority
1	3 month Training-cum-workshop	UNIX/C	University Computer Centre,CU	January 10-March 31,1999	Participant	Computer Centre,CU
2	2-Days Workshop	Computational Paradigms in Bio Informatics Research	Dept. of CSE & IT, NSEC, Kolkata	31 Mar-1 April, 2006	Organizer and Participant	TEQIP, World Bank
3	1-Week Short Term Course (STC)	Professional Office Automation (Organized Sector)	Dept. of CSE & IT, NSEC, Kolkata	2-5 May, 2006	Organizer & Resource Person	TEQIP, World Bank
4	2-Week STC	Introduction to Multimedia & Web Page Design (Unorganized And Self Employed)	Dept. of CSE & IT, NSEC	20-29 Nov, 2006	Organizer & Resource Person	TEQIP, World Bank
5	3 Days Workshop	Management capacity and Vision development	NITIE,Mumbai	16-18, October,2006	Participant	TEQIP, World Bank
6	2-Weeks STC	Hardware Installation and PC Maintenance	Dept. of CSE & IT, NSEC	1-14 February, 2007	Organizer	TEQIP, World Bank
7	One Week Short Term Course	Mechatronics- An Integrated Approach	BESU,Shibpur	24-29, September,2007	Participant	TEQIP Project
8	2-Weeks QIP STC	Image and Video Processing	IIT-KGP	19 Feb-2 Mar, 2007	Participant	AICTE, New Delhi
9	1-Day Seminar	Emerging trends on Courseware Engineering	Dept. of CSE & IT, NSEC	26 April, 2007	Organizer & Participant	TEQIP, World Bank
10	1-Week STC	Desk-Top Publishing (Unorganized & Self Employed Sector)	Dept. of CSE & IT, NSEC	28 May-4 June, 2007	Organizer	TEQIP, World Bank
11	1-Week STC	Computer Handling Skill (Unskilled Staff Members)	Dept. of CSE & IT, NSEC	23-27 July, 2007	Organizer	TEQIP, World Bank
12	2-Weeks STC	Introduction to MS-Office and Database Management System	Dept. of CSE & IT, NSEC	20 Aug-5 Sept, 2007	Organizer	TEQIP, World Bank
13	2-Weeks STC	Hardware & PC Maintenance	Dept. of CSE & IT, NSEC	20 Sept-8 Oct, 2007	Organizer	TEQIP, World Bank
14	1-Day Workshop	Solving Some Problems of Computational Biology	Dept. of CSE & IT, NSEC	28 November, 2007	Organizer & Participant	TEQIP, World Bank

Sl. No	Events	Titles	Organized By	Duration	Nature of Participation	Sponsoring Authority
15	1-Week STC	Professional Management for Academic Excellence	NITTTR-Kolkata at NSEC	4-8 February, 2008	Participant	TEQIP, World Bank
16	One day Seminar	Recent Trends in Intelligent Computing (INFOCOM 2008)	Seacom Engineering College	November 8, 2008	Organizer & Participant	Seacom Engineering College
17	One day Seminar	Computer Intelligence Applications (INFOCOM 2011)	Seacom Engineering College	February 11, 2011	Organizer & Participant	Seacom Engineering College
18	2 weeks ISTE STTP workshop	Control System	SKFGI	2-12, December, 2014	Organizer & Participant	IIT-KGP (MHRD), A View Technology
19	2 days National Conference	IC3-2014	SKFGI	3-4, January, 2014	Organizer & Participant	SKFGI
20	2 days International Conference	C2E2 2015	SKFGI	9-10, January 2015	Organizer & Participant	SKFGI
21	2 weeks ISTE STTP workshop	Introduction to Design of Algorithm	SKFGI	25-30, May 2015	Organizer & Participant	IIT-KGP (MHRD), A View Technology
22	2 days workshop for FDP	Applied Electromagnetics, Circuits, Digital Signal processing and Control Engineering	SKFGI	22-23, June 2015	Organizer & Participant	SKFGI
23	Workshop for FDP	Latex	SKFGI		Organizer & Participant	Spoken Tutorial- IIT Bombay
24	2 weeks ISTE STTP workshop	CMOS, Mixed signal and RF VLSI Design	SKFGI	30.12.16 to 04.01.16	Organizer & Participant	IIT-KGP (MHRD), A View Technology
25	4 weeks FDP Course	Outcome based pedagogic principles for effective teaching	IIT-KGP	23.01.17 to 18.02.17	Participant	NPTEL-IIT-KGP
26	2 weeks FDP Course	Foundation Program in ICT for Education:	Bombay-IIT	03.08.17-07.09.17	Participant	MHRD
27	2 weeks FDP Course	Pedagogy for Online and Blended Teaching-Learning Process	Bombay-IIT	04.09.17-12.010.17	Participant	MHRD

Sl. No	Events	Titles	Organized By	Duration	Nature of Participation	Sponsoring Authority
28	One day workshop	Digital Pedagogy: A learners future	MAKAUT, WB	24.04.19	Participant	TEQIP-III, MAKAUT
29	One week FDP	Business Analytics	MCKB Institute of Engg., WB	12.10.20-17.10.20	Participant	AICTE Sponsored
30	One week FDP	Machine Learning & Data Science Application using Python	MSIT,WB	07.09.20-11.09.20	Participant	Sponsored by All India Data Science & Machine Learning Application and Engg. & Management College Teachers Association
31	One week FDP	Artificial Inteligence Using Python	Govt. College of Engg. And Ceramic Technology	14.0920-19.09.20	Participant	Brainovision Solutions Ind. Pvt. Ltd and national Youth Council of India
32	One day workshop	Cyber Security	Indian Cyber Security Solutions	29.08.20	Participant	Indian Cyber Security Solutions
33	One day workshop	Prior art Searching with Google Patents	Turnip Innovations Pvt. Ltd.	06.09.20	Participant	Turnip Innovations Pvt. Ltd.