

## Computing Laboratory

*Prof. (Dr.) J. K. Mandal*  
*Kalyani University, India*

Research of this laboratory starts in the year of 1990 when the Principal Investigator (Prof. (Dr.) J. K. Mandal) joined as Lecturer in the department of Computer Science & Application, University of North Bengal

The first paper of this laboratory was published in the Journal of INSA at 1990. Since then the scholars of the laboratory actively engaged in research in various fields in computing systems.

Being M.Sc. in Physics from Jadavpur University in 1986, M.Tech. in Computer Science from University of Calcutta, he was awarded Ph.D. (Engg.) in Computer Science & Engineering by Jadavpur University in 2000. Presently he is working as Professor of Computer Science & Engineering and former Dean, Faculty of Engineering, Technology and Management, Kalyani University, Kalyani, Nadia, West Bengal for two consecutive terms. He started his career as lecturer at NERIST, Arunachal Pradesh in Sept., 1988. He has teaching and research experience of 28 years. His area of research is Coding theory, Data and Network Security, Remote Sensing & GIS based Applications, Data Compression, Error correction, Visual Cryptography and steganography. He has produced 11 Ph. D degrees three submitted (2015) and 8 are pursuing. He has supervised 3 M. Phil and 26 M. Tech. Dissertation and more than 60 MCA projects. He is life member of Computer Society of India since 1992, CRSI since 2009, ACM since 2012, IEEE since 2013 and Fellow member of IETE since 2012, Executive member of CSI Kolkata Chapter, Vice Chairman (Elect. 2015-2016). He has chaired number of sessions in various International Conferences and delivered more than 60 expert/invited lectures. Attended number of conferences and delivered 4x5 days expert lectures as guest faculty and organized 20 National & International Conferences during last three years. He is reviewer of various International Journals and Conferences, since 1994. He is chief editor of various National/International Journals of AIRCC, editors of various National/International Conferences and proceedings.

- 1. Organized International Conference on Intelligent Infrastructure one the eve of CSI 2012 as Program Chair.**
- 2. Organized Zonal Seminar at IETE Kolkata during 30-31 August 2013 as Program Chair.**
3. International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2014, 14-15 November, 2014 at Bhubaneswar Engineering College, Bhubaneswar member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>

4. Computational Intelligence in Data Mining (Published by Springer Volume 1 & 2), ICCIDM, Department of Computer Science and Engineering, Veer Surendra Sai University of Technology (VSSUT), Burla, Sambalpur - 768018, Odisha, India, 20-21 December 2014, **Smart Innovation, Systems and Technologies, Springer** as Program Co-Chair & Editor. Link: Volume I: <http://link.springer.com/book/10.1007/978-81-322-2205-7> Volume II: <http://link.springer.com/book/10.1007/978-81-322-2208-8> Volume III: <http://link.springer.com/book/10.1007/978-81-322-2202-6>
- 6 Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India CSI Volume 1 & 2, CSI 2014, 14-16 December, 2014 at JNTU Hyderabad as Program Chair and member of Editorial Board of the Proceedings to be published -**Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland**.Link: <https://books.google.co.in/books?isbn=331913728X>
- 7 Information Systems Design and Intelligent Applications Proceedings of Second International Conference INDIA 2015, Volume 1 and Volume 2, Smart Innovation, Systems and Technologies, Springer, as Program Chair, Publication Chair, 8-9 January, 2015, Kalyani University Vol 1: <http://link.springer.com/book/10.1007/978-81-322-2250-7>; Vol 2: <http://link.springer.com/book/10.1007/978-81-322-2247-7>.
- 8 The Institution of Electronics and Telecommunication Engineers, Kolkata Center organized two days Zonal Seminar on ICT in Present Wireless Revolution: Challenges and Issues, 30-3<sup>1st</sup> August, 2013, as Program Chair and Editor of the Proceedings with ISBN No. 978-93-5126-699-0.
- 9 Two days International Conference on Computational Intelligence: Modeling, Technique and Applications Department of Computer Science & Engineering, Kalyani University, Kolkata organized two days International Conference on Computational Intelligence: Modeling, Technique and Applications, 27-28<sup>th</sup> September, 2013, as Program Chair Coordinator and Editor of the Proceedings ELSEVIER, Science Direct has published the proceedings of CIMTA - 2013 which is available on: <http://www.sciencedirect.com/science/journal/22120173/10>
- 10 Chief Editor, Advanced Computing: An International Journal (ISSN : 2229 - 6727 [Online] ; 2229 - 726X [Print]), Publication : AIRCC, Editor : J. K. Mandal, University of

Kalyani,  
India, Link: <http://airccj.org/csecfp/library/nc.php?t001=108>.

- 11 Editor of International Conference on Intelligent Infrastructure as Program Chair on the Eve of Annual Convention of CSI 2013 at Science City Kolkata during 1-2 December 2013.
- 12 First International Conference on Intelligent Computing and Communication, (ICIC2- 2016), during 18-19 February 2016 at University of Kalyani, member of editorial Board, Program Chair, Corresponding Editor of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2015
- 13 Information Systems Design and Intelligent Applications Proceedings of Third International Conference INDIA 2016, Volume 1. Volume 2 and Volume 3 at ANITS, Visakhapatnam, member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2016..
- 14 9th International Conference on Advanced Computing & Communication Technologies' [9th ICACCT 2015], Asia Pacific Institute of Information Technology, Panipat on 27th-29th November , 2015 14 member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2015
- 15 International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2015, 14-16 November,2015 at National Institute of Technology, Durgapur member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2015
- 16 \Second International Conference on Computer and Communication Technologies, IC3T, 2015, CMR Technical Campus, Hyderabad, 24-26 July 2015, member of Editorial Board of the proceedings Published Advances in Intelligent Systems and Computing(AISC 379,380,381), Springer Verlag, Switzerland  
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- 17 International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2014, 14-15

- November, 2014 at Bhubaneswar Engineering College, Bhubaneswar member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2014
- 18 Computational Intelligence in Data Mining (Published by Springer Volume 1 & 2), ICCIDM, Department of Computer Science and Engineering, Veer Surendra Sai University of Technology (VSSUT), Burla, Sambalpur - 768018, Odisha, India, 20-21 December 2014, Smart Innovation, Systems and Technologies, Springer as Program Co-Chair & Editor. Link: Volume I: <http://link.springer.com/book/10.1007/978-81-322-2205-7> Volume II: <http://link.springer.com/book/10.1007/978-81-322-2208-8> Volume III: <http://link.springer.com/book/10.1007/978-81-322-2202-6>, 2014
- 19 Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India CSI Volume 1 & 2, CSI 2014, 14-16 December, 2014 at JNTU Hyderabad as Program Chair and member of Editorial Board of the Proceedings to be published -Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland. Link: <https://books.google.co.in/books?isbn=331913728X>, 2014
- 20 Information Systems Design and Intelligent Applications Proceedings of Second International Conference INDIA 2015, Volume 1 and Volume 2, Smart Innovation, Systems and Technologies, Springer, as Program Chair, Publication Chair, 8-9 January, 2015, Kalyani University Vol 1: <http://link.springer.com/book/10.1007/978-81-322-2250-7>; Vol 2: <http://link.springer.com/book/10.1007/978-81-322-2247-7>, 2014
- 21 Guest Editor of 'Microsystem Technologies of Springer', publishing special issue from extended version of "1st International conference on 'Microelectronics, Circuits and Systems'", Micro-2014 from 11th to 13th July in Hotel Hayat, Kolkata, India. 2014.
- 22 West Bengal Council of Higher Education Sponsored Two days workshop on Computational Methodology and Applications (CMA) on 22-23 April 2012 at CSE, KU, 2012.
- 23 The Institution of Electronics and Telecommunication Engineers, Kolkata Center organized two days Zonal Seminar on ICT in Present Wireless Revolution: Challenges and Issues, 30-31st August, 2013, as Program Chair and

Editor of the Proceedings with ISBN No. 978-93-5126-699-0., 2013.

- 24 Two days International Conference on Computational Intelligence: Modeling, Technique and Applications Department of Computer Science & Engineering, Kalyani University, Kolkata organized two days International Conference on Computational Intelligence: Modeling, Technique and Applications, 27-28th September, 2013, as Program Chair Coordinator and Editor of the Proceedings ELSEVIER, Science Direct has published the proceedings of CIMTA - 2013 which is available on: <http://www.sciencedirect.com/science/journal/22120173/10>, 2013.
- 25 Guest Editor of CSI Journal of Computing, Vol. 2 , No. 1: <http://www.csi-india.org/journal-of-computing> ([http://www.csijournal.org/luitdocks-publications/Editorial-2-1-57-57.pdf](http://www.csijournal.org/luitdocks/publications/Editorial-2-1-57-57.pdf) ), 2013.
- 26 Chief Editor, Advanced Computing : An International Journal, ISSN:2229-6727[online]; 2229-726X[print] of AIRCC.
- 27 Chief Editor, Proceedings of International Conference on "Intelligent Infrastructure" under CSI-2012([www.csi-2012.org](http://www.csi-2012.org)) organized by CSI on the eve of CSI Annual Convention, 2012.
- 28 Chief Editor, Proceedings of ETCS 2012, organized by Dept. of CSE, Rastraguru Surendranath College, Barrackpur, February 2012.
- 29 Chief Editor, Proceedings of NIDS-98 of CSI organized by CSI Siliguri Chapter, CSI Networking Division at Darjeeling Gimkhana Club 1998.
- 30 Chief Editor, Proceedings of ERC-95, Organized by CSI Siliguri Chapter and CSI Eastern Region at Siliguri in 1995.
- 31 Conducted a Special Session as Chair in CSI-2013 at Visakhapatnam during 13-15 December 2013.
- 32 He has published more than 330 articles out of which 115 articles in various National and International Journals.
- 33 He has published 5 books from LAP Germany and one book from IGI Global.

He was awarded A.M. Bose Memorial Silver Medal for securing highest marks in the paper "Nuclear Physics and Cosmic Rays" in M.Sc. and Kali Prasanna Dasgupta Memorial Silver Medal for securing highest marks in the paper "Nuclear Physics and Cosmic Rays" in M.Sc.

*India International Friendship Society (IIFS), New Delhi conferred "Bharat Jyoti Award" for meritorious services,*

*outstanding performance and remarkable role in the field of Computer Science & Engineering on 29th August, 2012.*

**Maraque World Who's Who published biography of Prof. Mandal in their 31st edition to be published in November 2013**

**Chapter Patron Award, CSI Kolkata Chapter, 2014 has been conferred in CSI Annual Convention, JNTU, Hyderabad during 14-16 December, 2014**

Prof. J. K. Mandal has developed a relationship with Logitech India Privale Limited in terms of research activities.

A proposals /models of future unified technologies had send from the Lab of J K Mandal which is going to be emerged in near future for wireless communication devices The authority of Logitech head office have approved and accepted the research proposal. The company has been agreed to have a collaborative research activities leading to Ph. D. to the employees of Logitech with the University of Kalyani under the purview of research activities of the laboratories of J K Mandal. The following activities are to be made during the course of collaborative research .

- Some of the Logitech employee will take part in research activities.
- Eligible employees of Logitech will enrolled for Ph. D work following University Ph. D norms.
- Logitech will implement the technology as a device
- University will publish the research results

The Logitech has agreed to provide infrastructure of research facilities along with funds for scholarships and collaborative activities.

Logitech Chennai has also approved the candidature of Mr. Partha Acharya, Senior Engineer, Logitech who will be associated with this program as first employee of Logitech. One of the Major objective and activity of this Research Laboratory is the import qualitative and quantities knowledge to the scholars of the laboratories along side with then regular curriculum so that they can well equipped themselves before entering into the real world of implementation during the analysis design and then final semester project work.

**One DST Inspire scholar awarded Ph. D., One DST PUESE Scholar awarded Ph. D. and one University Research Scholars (URS) awarded Ph. D under the supervision of the Principal Investigator in the Computing Laboratory. Sixteen scholars awarded Ph. D. under the supervision of the PI**