

Anal Acharya



1. BSc. (Hons.) in Mathematics, Vidyasagar College, **University of Calcutta**, 1993.
2. M.C.A, **Jadavpur University**, 1997.
3. M.E (I.T) ,**West Bengal University of Technology**, 2006.
4. Ph.D. (Tech.) in Computer Science & Engineering from **University of Calcutta** awarded on 13.07.2017.

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Profile: Anal Acharya is Assistant Professor in the Department of Computer Science in St. Xavier's College, Kolkata. He was the **Head** of the **Department of Computer Science** from the period of **01.01.2009 to 30.06.2013**. His present research interest is Educational Data Mining (EDM). He has above 20 years of experience in undergraduate and post graduate teaching & supervised several post graduate dissertations. He has several accepted papers in International Conferences and Journals. He is a member of the Board of Reviewers for the Multi-disciplinary Research Journal of St. Xavier's College "Aviskaar - The Xaverian Journal of Research". The details of his achievements are given below:

A. Book Chapters

Serial	Chapter Details
1.	Anal Acharya, Madhurima Ghosh, Saran Jha, <i>Automated Detection and Removal of Cycles in a Concept Map</i> , Advancing Online Course Design and Pedagogy for the 21st Century Learning Environment, IGI Global.
2.	Soumili Dey, Suchandra Datta, Anal Acharya, and Debabrata Datta, <i>Blended learning: Is it the way ahead?</i> , Handbook of Research on Digital Language Pedagogies, IGI Global.
3.	Anal Acharya, Soumen Mukherjee, Arup Kumar Bhattacharjee, Debabrata Datta, Arpan Deyasi, <i>COVID-19: Will it be a Game Changer in Higher Education in India?</i> , Data Science for Covid-19, Elsevier.
4.	Soumili Dey, Suchandra Datta, Anal Acharya, and Debabrata Datta, <i>A Set of Empirical Models to Evaluate E-learning Web Sites and Their Comparison</i> , Computational Intelligence in Digital Pedagogy, Volume 197, Intelligent Systems Reference Library, Springer.

5.	Anal Acharya, Devadatta Sinha: <i>A Web based Collaborative Learning System using Concept Maps: Architecture and Evaluation</i> . Handbook of Research on Natural Computing for Optimization Problems, IGI Global.
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B. Papers in International Journals

Serial	Paper Details
1.	Srijita Majumdar, Debabrata Datta, Arpan Deyasi, Soumen Mukherjee, Arup Kumar Bhattacharjee, Anal Acharya, <i>Sarcasm Analysis and Mood Retention using NLP Techniques</i> , International Journal of Information Retrieval Research, IGI Global
2.	Anal Acharya, Devadatta Sinha, <i>An Educational Data Mining Approach to Concept Map Construction for Web based Learning</i> , Informatica Economică vol. 21, no. 4/2017.
3.	Anal Acharya, Devadatta Sinha, <i>A Mixed Strategy for Collaborative Group Formation and Its Learning Outcomes</i> , Journal of Educational Technology Systems, SAGE Publications.
5.	Anal Acharya, Devadatta Sinha, <i>An Intelligent Web based system for Diagnosing Student Learning Problems using Concept Maps</i> : Journal of Educational Computing Research, SAGE Publishers.
6.	Anal Acharya, Devadatta Sinha: <i>Smart Concept Map Generation for Learning Using Class of Hash Functions</i> , Smart Computing Review, Volume 5, Issue. 4, pp 329-339, August 2015.
7.	Anal Acharya, Devadatta Sinha: <i>A Multi-Dimensional Assessment Model to Evaluate Web Based Learning Systems</i> , Informatica Economica, Volume 19, Issue 3, pp 32-45, September 2015.
8.	Anal Acharya, Devadatta Sinha, Anurag Sarkar, Dibyabivya Seth, Kaustav Basu: <i>A 'Mixed' Approach to Smart Group Formation in Collaborative Learning</i> . Smart Computing Review, Volume 5, Issue. 5, pp 483-497, October 2015.
9.	Anal Acharya, Devadatta Sinha: <i>A Study on the Use of Concept Maps in Web Based Learning</i> , International Journal of Computer Science and Information Technologies, Volume 6, Issue 5, pp. 4191-4200.
10.	Anal Acharya, Devadatta Sinha : <i>Early Prediction of Students Performance using Machine Learning Techniques</i> , International Journal of Computer Applications, Volume 107, Issue 1, pp 37-43, December 2014.
11.	Anal Acharya, Devadatta Sinha : <i>Application of Feature Selection Methods in Educational Data Mining</i> , International Journal of Computer Applications, Volume 103, Issue 2, pp 34-38, October 2014.
12.	Anal Acharya, Devadatta Sinha : <i>Assessing the Quality of M-Learning Systems using ISO/IEC 25010</i> , International Journal of Advanced Computer Research, Volume-3, Number-3, Issue-12, pp 67-75, September 2013.
13.	Anal Acharya, Soumen Mukherjee: <i>Designing A Re-Configurable Fractional Fourier Transform Architecture Using Systolic Array</i> , International Journal of Computer Science Issues, Vol. 7, Issue 6, pp 159-163, November 2010.

C. Papers presented in International Conferences

Serial	Paper Details
1.	Anisha Mitra, Aakash Decosta, Nilanjana Roychoudhury and Anal Acharya, <i>Students' performance prediction using Educational data mining</i> , Lecture Notes in Electrical Engineering, International Conference on IoT and its Applications, NIT Jamshedpur, 26-27 December, 2020, Springer, 2020.

2.	Anal Acharya, Devadatta Sinha : <i>A Concept Map Approach to Supporting Diagnostic and Remedial Learning Activities</i> , Advanced Computing, Networking and Informatics (ICACNI 2014), St. Thomas College of Engineering and Technology, Volume 1, pp. 565-575, 25-27 June, 2014, Springer International Publishing (2014).
3.	Anal Acharya, Devadatta Sinha : <i>Construction of Automated Concept Map of Learning using Hashing Technique</i> , Frontiers in Intelligent Computing: Theory and Applications (FICTA 2014) , Volume 1, pp. 567- 578, 14-15 November 2014, Springer International Publishing (2015).
4.	Anal Acharya, Devadatta Sinha : <i>A Weighted Concept Map Approach to Generate Learning Guidance in Science Courses</i> , Information Systems Design and Intelligent Applications (INDIA 2015) , Kalyani University, Volume 2, pp. 143-152, 8-9 January, 2015, Springer International Publishing (2015).
5.	Anal Acharya, Devadatta Sinha : <i>A Hierarchical Framework to evaluate the Learning Characteristics of M-Learning</i> , First International Science and Technology Congress 2014 (IEMCONGRESS 2014), Institute Of Engineering and Management (IEM) , pp. 58-66 , August 28-29, 2014, Elsevier Science and Technology Procedia.
6.	Anal Acharya, Devadatta Sinha : <i>Dimension reduction in distributed data mining using Wavelet Transforms</i> , Second International Conference on Computing and Systems (ICCS 2013), Burdwan University, pp. 214-217, September 21-22, 2013, McGraw Hill Education.
7.	Anal Acharya, Devadatta Sinha: <i>Towards Reduction of Data Flow in a Distributed Network using Principal Component Analysis</i> , Advancement of Computing in Engineering Research (ACER 2013), March 22-23, 2013.
8.	Soumen Mukherjee, Anal Acharya, <i>An Efficient Reconfigurable Architecture for Fractional Fourier Transforms</i> , International Conference in Signals, Systems and Automation (ICSSA-09) , CGET, Anand, 28-29 December, 2009, pp. 85-88, Universal Publishers.
9.	Soumen Mukherjee, Debabrata Datta, Anal Acharya, <i>Patenting Software: An Ethical Issue</i> , International Conference on Business Ethics and Corporate Social Responsibilities (ICBECSR'09), KLMR, Belgaum, 3-5 December 2009, pp. 276-280, Macmillan Publishers.
10.	Anal Acharya, Soumen Mukherjee, <i>Modeling Value Chain Analysis of Distance Education using UML</i> , International Conference on Modeling, Optimization and Computing (ICMOC 2010), NIT Durgapur, October 28-30, 2010, American Institute Of Physics (AIP), AIP Conf. Proc. 1298, 658 (2010).

C. Papers in Aviskar : A Xaverian Journal of Research

Serial	Paper Details
1.	Anal Acharya, Devadatta Sinha, <i>A Comparative Study of Personalized and Collaborative Concept Map based Web Learning Systems</i> , Volume X, 2018.
2.	Kaustuvi Basu, Ayan Roy, Anal Acharya : <i>Dimension Reduction of Educational Data Using Principal Component Analysis</i> , Volume VII, January, 2015.
3.	Soumalik Roy, Kaushik Mitra, Prity Gupta, Anal Acharya : <i>An Obstacle Avoidance Algorithm using Fuzzy Neural Network</i> , Volume VI, January, 2014.
4.	Sumona Sil, Madhurima Bose, Sayanti Chakraborty, Anal Acharya : <i>A New Approach to e-mail Cleaning</i> , Volume V, January, 2013.

D. Papers presented in National Conferences

Serial	Paper Details
1.	Anal Acharya, Debabrata Datta, Soumen Mukherjee : <i>A Study on Use of ICT in Indian Education</i> " ICT in Higher Education-Opportunities and Challenges in the 21st Century, St.Xavier's College, Kolkata (Autonomous), 28th March, 2012 pp. 18-23.
2.	Anal Acharya Soumen Mukherjee : <i>Designing Fractional Fourier Transforms using Systolic Arrays</i> , National Conference on Emerging Trends in Computer Science and Information Technology (ETCSIC) -2010, K K Wagh Institute of Engineering Education and Research , Nasik, 29-30th January 2010, pp. 163-166.
3.	Soumen Mukherjee, Anal Acharya and Moumita Ghosal, <i>An Object Based Design & Implementation of Data Cleaning</i> , National Seminar on Data Mining & Decision Support, Vidyasagar University, 4-5 th March 2010, pp. 32-37.

E. Session Chairs

Serial	Session Details
1.	" <i>Re-imaging India: Challenges and Opportunities in Finance, Management and Policy Making</i> ", Organized by the Departments of Commerce and Business Administration held on 19-20 th September,2014 in St. Xavier's College Kolkata for the technical session on the track "Operations Research".

F. Seminars/Workshops attended

Serial	Seminars/Workshop Details
1.	One day Workshop on "Matlab and Simulink" organized by <i>Department of Computer Science</i> in association with <i>Elmax Projects and Services</i> , held in St. Xavier's College, Kolkata on 18 th December, 2015.
2.	One day Workshop on "Linux Administration and Virtualization" organized by <i>Department of Computer Science</i> , held in St. Xavier's College, Kolkata on 22 nd December, 2014.
3.	One day Workshop on "Information Retrieval" organized by <i>Department of Computer Science</i> in association with <i>Information Retrieval Society of India</i> , held in St. Xavier's College, Kolkata on 27 th March, 2011.
4.	One day Workshop on "MATLAB and Simulink Toolboxes" organized by <i>Department of Computer Science</i> in association with <i>Computer Society of India Kolkata Chapter</i> , held in St. Xavier's College, Kolkata on 2 nd October, 2010.
5.	One day Seminar on "Modeling and Simulation Techniques for Computational

	Problems using MATLAB” organized by <i>Department of Computer Science</i> in association with <i>Computer Society of India Kolkata Chapter</i> , held in St. Xavier’s College, Kolkata on 1 st October, 2010.
6.	One day Seminar on “Data Mining and Data Warehousing” organized by <i>Department of Computer Science</i> held in St. Xavier’s College, Kolkata on 31 st October, 2009.
7.	Workshop on “Oracle 9i fundamentals & introduction to DBA 1” organized by <i>Oracle University</i> held in Bangalore, 22-28 th November, 2008.
8.	Workshop on “Technology development in Indian Languages” organized by <i>Indian Statistical Institute</i> held in Kolkata, 19-23 th March, 2001.

G. Courses Offered

Msc. (Computer Science)

CMSM 4121	Data Structure and Analysis of Algorithms
CMSM 4222	Computer Networking and Internet Technologies
CMSM 4322	Artificial Intelligence
CMSM4432	Data Mining and Data Warehousing (Elective)

Bsc. (Computer Science)

HCSCR2041T	Discrete Mathematical Structures
HCSCR3071T	Data Communications and Computer Networks
HCSCR4082T	Design and Analysis of Algorithms