

## CURRICULAM VITAE

1. Name (in BLOCK LETTERS): Dr. BANANI SAHA
2. Date and Place of Birth: **29 January, 1960**
3. Indicate whether belonging to (SC / ST / OBC / Others): GENERAL
4. Department: **Computer Science and Engineering**
5. Address for Communication: **Dept. of Computer Sc. & Engg.  
JD-2, Sector III, Salt Lake City,  
Kolkata - 98**
6. Permanent Address: Flat No. 27, Naba Ananda Niketan  
Cooperative Housing Soc.  
632 Dum Dum Park, Kolkata - 55

7. Telephone Number:

Office	Residence	Mobile
	+913325919652	+919433130715

8. E-mail: [bsaha\\_29@yahoo.com](mailto:bsaha_29@yahoo.com)
9. Teaching experience: 32 years.
10. **Currently the Head of the Department in Computer Science and Engineering from February 2018.**

### 11. Academic Qualifications

School/College & Board/University	Examinations Passed	Year of Passing	Class or Divn.	Percentage of marks	Subjects studied	Any other information
University of Calcutta	B. Tech.	1982	I	80%	Computer Science	2 <sup>nd</sup> in order of merit
University of Calcutta	M. Tech.	1984	I	89.5%	Computer Science	1 <sup>st</sup> in order of merit
University of	Ph.D. (Tech)	1991			Computer Science	

Calcutta						
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## 12. Award / Honours:

- (i) **Awarded national scholarship for excellent results in both Higher Secondary and B. Sc. (Hons.) Examinations.**
- (ii) **Awarded certificate from University of Calcutta for securing 2<sup>nd</sup> highest marks in B. Tech (CSE).**
- (iii) **Awarded certificate and medal from University of Calcutta for ranking 1<sup>st</sup> position in M. Tech (CSE)**
- (iv) **Selected one of the two lecturers in the newly constituted Department of Computer Science (later renamed as the Department of Computer Science and Engineering), University of Calcutta in 1985, based on my B. Tech. result, before completion of my M.Tech. course (as per AICTE norms).**

## 13. Any other information:

- (i) Worked twice as the HOD of Computer Science and Engineering, C.U. from Dec. 1994 – Dec. 1996 and March 2001 – March 2003.
- (ii) Worked as the Chairperson, PG BoS in Computer Science and Engineering. C.U. (two years each) in two different periods: 94-96 and 01-03.
- (iii) As a teacher and also as HOD I am/have been associated with different works related to students' welfare and discipline.
- (iv) I served the SNDT University in Mumbai from Dec. 1998 to Feb. 2001. During this period, I was appointed In-Charge of the Computer Science and Technology Department. Since it was virtually a new department of the University, the responsibility was quite challenging to me. Effectively I was the single person in the department responsible for curriculum design, structuring of syllabus, setting up new laboratories and making collaboration with industries. During this tenure, I was nominated a member of Technical Committee of the University, a higher academic body constituted for framing a system for academic developments in different departments.
- (v) I worked as a member of different selection committees of DRDO, Ministry of Defense at IIT-Kharagpur, Delhi, Pune, Bangalore and Hyderabad.
- (vi) I worked as the coordinator of a Refresher course in Computer Science for U.G & P.G Teachers from different universities and colleges under the Academic Staff College, C.U. (19<sup>th</sup> Sept, 2002 – 10<sup>th</sup> Oct, 2002).
- (vii) I was/am associated with different bodies (as chairperson/member) like P.G Board of studies, Departmental Committee and Faculty Council. I am making regular

contributions towards teaching, research and curriculum development in areas of Science, Engineering and Technology.

- (viii) I worked as a member of the selection committee for State Public Service Commission (PSC) and Staff Selection Commission (SSC).
- (ix) I served as an expert member of the different academic inspection committees on invitation from CU and WBUT.
- (x) I served as a member of the Ph.D. (Tech.) Committee in Computer Science & Engineering of the University of Calcutta.
- (xi) I acted as a member of the Program Committee (PC) and the Organizing Committee (OC) of several National & International Conferences/Seminars & Workshops.
- (xii) I acted as a Chair in conducting several technical sessions and tutorial presentations in International Conferences.
- (xiii) I participated in the preparation of B. Tech. and M.Tech. curricula in Computer Science & Engineering and M.Sc. curriculum for Computer & Information Science of the University of Calcutta.
- (xiv) I acted as reviewer for research papers for publication in different journals as well as for International Conferences/ Symposia.
- (xv) Presently, 5 research scholars [two registered, one enrolled and two more yet to be enrolled] are working under my supervision for pursuing Ph.D. (Tech.) program under the University of Calcutta in Computer Science and Engineering as well as in Information Technology.

**14. Research Experience excluding years spent in M.Phil. / Ph.D. (in years): 25 years.**

**18. Number of Projects supervised in the M. Tech. Programme: 30**

**19. Research, Publications, and Academic Contributions (From 2006 onwards ,previous years not mentioned):**

**A) Published Papers in Journals**

S. No.	Title with Page No.	Journal (Vol., Year)	ISSN / ISBN	Whether peer-reviewed ; Impact factor, if any.	No. of co-authors	Whether you are the main author
1	Realization of Petrinets: A System Theoretic Approach, pp.2407-2417	International Journal of Systems Science, Vol.19, No.11. Published Online :30 <sup>th</sup> May 2007	ISSN :0020-7721	Peer reviewed IF: 1.579	1	Yes

2	Representation and Analysis of Petrinets via Matrix State Equation Approach, pp 1-7	International Journal of Electronics, Vol. 65, No.1.Published online: 27 Apr 2007	ISSN:0020-7217	Peer reviewed IF: 0.751	1	Yes
3	A Computer based reduction technique for Petrinets, pp 49-59	International Journal of System Science, Vol. 22 No.22. Published online: 31 Jan 2007	ISSN: 0020-7721	Peer reviewed IF: 1.579	1	Yes
4	Implementation and fault simulation testing of combinatorial circuits, pp 665-678	International journal of Electronics, Vol 66, No.5, Published online: 06 Apr 2007	ISSN:0020-7217	Peer reviewed IF: 0.751	1	Supervisor
5	Data Quality mining using Genetic Algorithm, pp 105-112,	International Journal of Computer Science and Security, Vol. 3, Issue 2, 2009	ISSN NO-1985-1553	IF 1.25 Peer reviewed	1	Supervisor
6	Community Model Architecture - A New Data Fusion Paradigm for Implementation, pp. 4774 - 4783	International Journal of Innovative Research in Computer and Communication Engineering Vol. 2 Issue 6, Jan 2014	ISSN (Online): 2320-9801, ISSN (Print): 2320-9798	Peer reviewed IF: 5.618	1	Supervisor
7	Community Model – A New Data Fusion Filter Paradigm, pp. 25-31	American Journal of Advanced Computing Vol. 2, No. 1, Feb. 2015	ISSN 2368-1209	Peer reviewed IF 1.5	1	Supervisor
8	An Efficient Elliptic Curve Cryptography Arithmetic Using Nikhila Multiplication , PP.45-50	The International Journal of Engineering And Science (IJES), Vol. 4. Issue 4, April 2015	ISSN (e): 2319 – 1813, ISSN (p): 2319 – 1805	Peer reviewed	1	Supervisor

9	E-Governance Security using Public Key Cryptography With special focus on ECC	International Journal of Engineering and Science Invention Vol. 2, Issue 8, Aug. 2013	e-ISSN : 2319 – 6734 p-ISSN : 2319 – 6726	Peer reviewed IF: 1.786	1	Supervisor
10	Study of Various Parallel Implementations of Association Rule Mining Algorithm, pp12-16	American Journal Of Advanced Computing, Vol. 2, No.1, Feb. 2015	ISSN: 2368-1209	Peer reviewed	1	Supervisor
11	An Efficient Hybrid Elliptic Curve Cryptography System with DNA Encoding, Pages 33-39	International Research Journal of Computer Science (IRJCS) , Vol. 2, Issue 5, May 2015	ISSN: 2393-9842	Peer reviewed IF: 2.023	1	Supervisor
12	Parallel Implementation of Hyper clique Miner Algorithm for Association Analysis of Weighted Protein-Protein Interaction Network, Pages 43-48	International Research Journal of Computer Science (IRJCS), Issue 5, Volume 2 May 2015	ISSN: 2393-9842	Peer reviewed IF: 2.023	1	Supervisor
13	Analysis of Signalling Time of Community Model	International Journal of Mathematical Sciences and Computing (IJMSC), July 2015	ISSN: 2310-9025 (Print), ISSN: 2310-9033 (Online)	Peer Reviewed IF: 0.5714	1	Supervisor
14	Real Time Key Frame Extraction through Parallel Computation of Entropy Difference	Defence Science Journal	Submitted		3	Supervisor
15	Towards efficient Hyper clique miner	Defence Science Journal	Submitted		1	Supervisor

	technique for removing noise in Protein –Protein Interaction network					r
16	A step forward to revolutionized Intrusion Detection System using deep convolution Neural Network	Malaysian Journal of Computer Science	Submitted		3	Supervisor
17	Towards the speed enhancement of Association rule mining algorithm for Intrusion Detection System	IEEE Access	Submitted		1	Supervisor
18	Towards the efficient Hyper clique miner technique for removing noise in Protein –Protein Interaction network	Basic & Clinical Pharmacology & Toxicology ISSN: 1742-7835, e-ISSN:1742-7843	Submitted		2	Supervisor

**B (i) Articles/Chapters Published in Books:**

S. No.	Title with page Nos.	Book Title editor & publisher	ISSN/ISBN No.	Whether peer reviewed	No. of Co-author	Whether you are the main author	API Score
1	Computer-Aided Modeling of Embedded Systems Using Petrinets: in Information Technology Key to Progress, pp 177-190	Ed. S. Bandyopadhyay, Tata McGraw-Hill Publishing Co. Ltd., 1990	N/A	yes	1	Yes	5

**B (ii) Full Papers in Conference Proceedings**

S. No.	Title with page nos.	Details of Conference Publication	ISSN/ISBN No.	No. of Co-authors	Whether you are the main author	API Score
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1	Modeling and Analysis of Administrative system through Place-Transition nets, pp 6-29	CSI Proc., Vol-II	N/A	1	Yes	5
2	Graphics tools for representation and analysis of Petrinets,	Proceedings of the seminar on Parallel Processing Systems and their applications, pp 92-95, Institution of Engineers, 90	N/A	1	Yes	5
3	Heuristic Based Decision Tree Algorithm for Classification Problems in Data Mining	Proceedings of International Conference on Communications, Devices & Intelligent Systems (CODIS 2004) Jadavpur University	N/A	2	Yes	5
4	A New Approach to a Single Pass optimal Clustering Algorithm in Data Mining	Proceedings of International Conference on Communications, Devices & Intelligent Systems (CODIS 2004) Jadavpur University	N/A	2	Supervisor	5
5	Subscription fraud in telecommunication Modeling and Behavior Analysis through Statistical Measure Pp: 179 - 182	International Conference on Advanced Computing and Communications, (ADCOM 2006), 20-23 Dec. 2006	IEEE Catalog No. CFP06ADC-PRTE- ISBN: 1-4244-0716-8 Print ISBN:1-4244-0716-8	1	Yes	5
6	Quantum Cryptography	International Conf.	ISBN 81-	2	Supervisor	3

	Using Polarized Photons, Page 82-86	on Information Technology, H.I.T. 2009	89766-74-0			
7	Genome Compress: A Novel Algorithm for DNA Compression, Page 439-443	International Conf. on Information Technology H.I.T. 2009	ISBN 81-89766-74-0	1	Supervisor	3
8	Wavelet approach for Iris Recognition System	International Conference on Computing, Communications, Information Technology Applications (CCITA 2010)	ISBN 978-81-909789-0-3	1	Supervisor	3
9	Wavelet approach for edge detection in Iris Recognition System	International Conference on Advances in Computer Engineering ACE 2010	ISBN : 978-1-4244-7154-6	1	Yes	5
10	Optimal Face Recognition System using Ant-Colony Based Back Propagation Method	International Conference on Computers & Device for Communication (CODEC) 2009	N/A	1	Supervisor	3
11	Performance Analysis of AODV and DSR Routing Protocols for Ad-Hoc Networks pp. 297-305.	International Conference on Advanced Computing, Networking & Security, 2011	Print ISBN: 978-3-642-29279-8 Online ISBN: 978-3-642-29280-4 LNCS 7135 Springer-Verlag	2	Supervisor	3
12	A framework for discovering important	International Conference on	Print ISBN: 978-3-642-	1	Supervisor	3



	patterns from parallel mining of protein-protein interaction network	Computer & Communication Technology, 2015	29279-8 Online ISBN: 978-3-642-29280-4 LNCS 7135 Springer-Verlag			
13	Efficient analysis of clinical genomic database	ICCIDM-2018	Presented	1	Supervisor	
13	<b>DNA Encoded Elliptic Curve Cryptography System for IoT Security</b>	International Conference on Computational Intelligence & Internet of Things (ICCIoT) 2018	Presented	1	Supervisor	
14	<b>Gathering Identification using Image metrics for Intelligent Situation Awareness System in Real Time Scenarios</b>	CIPR-2019	Accepted	3	Supervisor	

#### Ongoing Projects / Consultancies:

S. No.	Title	Agency	Period	Grant / Amount Mobilized (Rs. Lakh)
1	Object Identification through Syntactic as well as Semantic Interpretation from given Spatio-Temporal Images (Principal	DRDO	3 Years	30

Investigator)			
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## 21. Completed Projects / Consultancies / Patents:

S. No.	Title	Agency	Period	Grant / Amount Mobilized (Rs. Lakh)	Whether policy document / patent as outcome
1	Design of Innovative Application and Resource Management Technique in Telecommunication Industries through Data Mining (Principal Investigator) No. of other investigators:0	AICTE F. No. 8021 /RID /NPROJ/ TAP-84	2004-2007	9.0	-
2	MODROB in the library of Computer Science Department (Principal investigator) No. of other investigators:0	AICTE F. No 8017/ RDII/BOR/95/MCOM063 /LIB/REC510	1996-98	7.0	Lab modernization
3	Education Research & Training in Visual Information Processing (Co-investigator) No. of other investigators:0	MHRD F.2-2/90 TD-6	1991-94	6.0	Upgradation of course structure, publication
4	Augmentation of facilities in Graphics & Microcomputer Laboratory (Co-investigator) No. of other investigators:0	MHRD F.1-4/87 T-7 (C. Sc.)	1988-90	22.94	Upgradation of course structure, new laboratory

**22. Research Guidance**

S. No.	Number Enrolled	Thesis Submitted	Degree awarded
M. Phil or equivalent	24	24	24
Ph.D. or	3+5 (R)	-	-

I declare that information provided are true to the best of my knowledge and documentary evidence for each information will be produced as and when required.