

RESUME



Dr. Grasha Jacob
Associate Professor of Computer Science,
Government Arts & Science College, Nagalapuram
Thootukudi District - 628 904
TAMIL NADU

PERSONAL DETAILS

Date of Birth : 28 January, 1971
Qualification : MCA., M.Phil., Ph.D.,
Designation : Associate Professor
Department : Computer Science
Community : BC
Religion : Christianity
Nationality : Indian
Email ID : grasharanjit@gmail.com

ACADEMIC QUALIFICATION

Degree	Specialization	College	University	Year of Passing
SSLC		Duthie Girls Higher Secondary School, Nagercoil	Board of Secondary School Education, Tamilnadu	1986
+ 2	Mathematics, Physics, Chemistry Computer Science	Duthie Girls Higher Secondary School, Nagercoil	Board of Higher Secondary School Education, Tamilnadu	1988
B.Sc.	Physics	Womens Christian College, Nagercoil	Madurai Kamaraj University	1991
M.C.A.	Computer Applications	Avinashilingam University, Coimbatore	Avinashilingam University, Coimbatore	1994
M.Phil.	Computer. Science	Manonmaniam Sundaranar University, Tirunelveli	Manonmaniam Sundaranar University, Tirunelveli	2003
Ph.D	Computer. Science	Bharathiar University, Coimbatore	Bharathiar University, Coimbatore	2016

ADDITIONAL COMPETENCY

Examination	NAME OF THE INSTITUTION	Year
SLET	Bharathidhasan University	1997
Account Test for Executive Officers	Government of Tamil Nadu	2002

TEACHING EXPERIENCE

Date of Appointment	SF : June 20, 1994 ; Govt. Service : October 21, 1998
Date of Retirement	January 31, 2031
Teaching Experience	2 years
Research	20 years

DETAILS OF RESEARCH WORK

Title of the Thesis	University where the work was carried out
Design of Cryptographic Techniques for the Secure Storage and Transmission of Images based on DNA Sequences	Bharathiar University, Coimbatore

AREAS OF RESEARCH

DNA Computing, Information Security, Digital Image Processing, Machine Learning

AWARDS RECEIVED

2017	Bronze Certificate - Certificate of Appreciation Income Tax Department, Govt. of India
2017	Certificate of Appreciation for presenting a paper in the Seminar on Developing New Curriculum - 2017 SCERT, Tamil Nadu
2019	Best Paper Award - II Prize International Conference, Sri Sarada College for Women
1986	National Merit Scholarship

ADMINISTRATIVE EXPERIENCE

S. No	DESIGNATION	INSTITUTIONS	YEAR
1	Head, Department of Computer Science,	Rani Anna Govt College for Women, Tirunelveli	2008 - 2022
2	Principal (FAC)	Govt Arts & Science College, Nagalapuram, Thoothukudi District	2023

FACULTY DEVELOPMENT PROGRAMME UNDERGONE			
S. No	Name of the Training	Name of the Sponsoring Agency	Place and Date
1	Orientation – 28 days	UGC	Academic Staff College Bharathiar University, Coimbatore May 2000
2	Refresher Course – 21 days	UGC	Academic Staff College,, University of Kerala, Trivandrum August 2001
3	Refresher Course – 21 days	UGC	Academic Staff College, Bharathidhasan University, Tiruchirapalli July 2006
4	Refresher Course – 21 days	UGC	Academic Staff College, University of Madras August 2007
5	Refresher Course – 5 days	Government of Tamil Nadu	Fatima College, Madurai Jan 17, 2005 – Jan 22, 2005
6	Train The Trainer	Government of Tamil Nadu	NASSCOM CTS, Chennai Aug 4, 2008 – Aug 7, 2008
7	Orientation Programme for Research Supervisors	Manonmaniam Sundaranar University, Tirunelveli	Nov 1. 2017
8	Online FDP	Government of Tamil Nadu	ICT Academy of Tamil Nadu 26.04.2021 – 30.04.2021
9	Online Capacity Building FDP	Sadakatullah Appa College	06.07.2021 – 12.07.2021
10	Online FDP	Government of Tamil Nadu	ICT Academy of Tamil Nadu 16.08.2021 – 20.04.2021

PUBLICATIONS				
BOOKS	BOOK CHAPTERS	SCOPUS INDEXED	WEB OF SCIENCE	UGC LISTED
1	5	6	2	7
OTHER INDEXED	AS A RESOURCE PERSON	PAPERS PRESENTED IN NATIONAL AND INTERNATIONAL SEMINARS	WEBINARS, SEMINARS, WORKSHOP ATTENDED	REVIEWER
11	20	15	14	12

PUBLICATIONS: BOOKS

S. No	Title of the Book	Publication	Year
1	Visual Basic Programming – A Step by Step approach	Margham Publications	2011

BOOK CHAPTERS

S. No	Title of the Paper	Name of the Book	Pages
1	Blockchain in Big Data for Agriculture Supply Chain	Blockchain and its Applications in Industry 4.0	257-291
2	Using Sliding Window Algorithm for Rainfall Forecasting	Proceedings of International Conference on Artificial Intelligence, Smart Grid and Smart City Applications	333-342
3	Air Pollution-Level Estimation in Smart Cities Using Machine Learning Algorithms	Proceedings of International Conference on Artificial Intelligence, Smart Grid and Smart City Applications	343-352
4	Secure storage and transmission of healthcare records	Consumer-Driven Technologies in Healthcare: Breakthroughs in Research and Practice,	220-247
5	DNA Sequence Based Cryptographic Solution for Secure Image Transmission	Handbook of Research on Modern Cryptographic Solutions for Computer and Cyber Security	505 – 527
6	Secure Storage and Transmission of Healthcare Records	Pattern and Data Analysis in Healthcare Settings	7 – 34

PUBLICATIONS: SCOPUS INDEXED JOURNALS & WEB OF SCIENCE

Sl. No	Title of the Paper	Name of the Journal	Volume, Issue, Impact factor & Pg. No
1	An Exploration of Crime Type and Prediction Using RALASD Feature Selection Algorithm with Deep Learning Technique	Turkish Journal of Computer and Mathematics Education	Vol. 12 (11) Pg.4516-4531
2	Comparative Analysis of Crime Type Prediction	Information Technology In Industry	Vol.9 (2) Pg.963-967
3	An efficient rainfall prediction scheme based on sliding window algorithm with effective distance metric measure	Turkish Online Journal of Qualitative Inquiry	Vol.12 (5) Pg.1272 – 1287
4	Particle Swarm Optimization based Machine Learning Algorithms for the Assessment of Air Quality Level	Turkish Online Journal of Qualitative Inquiry	Vol.12 (5), Pg.1288 – 1298
5	Integral correlation based optimal SD-OCT slice selection and pathology classification using handcraft and deep features	Journal of Mathematical and Computational Science	Vol. 11(2) Pg..2218 – 2231
6	Classification of Retinal Pathologies using Convolutional Neural Network	International Journal of Advanced Trends in Computer Science and Engineering	Vol. 9(3) Pg.. 365 – 3869
7	Robust Face Alignment Under Occlusion Via Regional Predictive Power Estimation	Compliance Engineering Journal	Vol.10 (8) Pg.31-37
8	Secure storage and transmission of images based on a dual encryption scheme	ARPJ Journal of Engineering and Applied Sciences	Vol. 9 Issue 11 Pg.. 2229–2233

PUBLICATIONS: UGC LISTED JOURNALS			
S. No	Title of the Paper	Name of the Journal	Volume, Issue, & Pg. No
1.	Spatial and Temporal Pattern based Crime Type Prediction using Deep Learning	Wesleyan Journal of Research	Vol.25 (3)
2.	A Review of Three Dimensional Face Recognition Algorithm using Deep Learning Methods	International Journal of Scientific Research and Reviews	Vol.8 (2) Pg.3974 – 3982
3.	A Broad Study on Personalized Web Search	Journal of Emerging Technologies and Innovative Research	Vol.6(4) Pg..391-395
4.	Spoken Language Identification System using MFCC features and Gaussian Mixture Model for Tamil and Telugu Languages	International Research Journal of Engineering and Technology	Vol.6(4) Pg..42 – 48
5.	A Review of Building Classification Models Using Associative Rule Mining	Journal of Applied Science and Computations	Vol.5 (9) Pg..858 – 862
6.	Improved Technique for Car Number Plate Recognition	International Journal of Creative Research Thoughts	Vol.6 (1) Pg.. 256 – 261
7.	An efficient approach for segmentation of retinal blood vessels	International Journal of Science Engineering and Management	Vol.2 (12) Pg..78 – 80

PUBLICATIONS: OTHER INDEXED JOURNALS			
Sl. No	Title of the Paper	Name of the Journal	Volume, Issue & Pg.No
1	An Analysis of Image Enhancement Based On Histogram Equalization Methods	International Journal of Engineering Research in Computer Science and Engineering,	Vol.5 Issue 3 Pg.305 – 309
2	On the Secure Storage and Transmission of Health Care Records Based on DNA Sequences	International Conference on Intelligent Computing Applications	Pg.118-121
3	On the Construction of Doubly Even Order Magic Squares	http://hal.archives-ouvertes.fr/docs , arXiv:1402.3273	http://hal.archives-ouvertes.fr/docs , arXiv:1402.3273
4	An Encryption Scheme with DNA Technology and JPEG Zigzag Coding for Secure Transmission of Images.	arXiv preprint arXiv:1305.1270	arXiv preprint arXiv:1305.1270
5	DNA based cryptography: An overview and analysis	International Journal of Emerging Sciences	Vol.3 Issue 1 Pg.36 - 40
6	A Hybrid Encryption Scheme using DNA Technology,	The International Journal of Computer Science and Communication Security	Vol.3 Issue 2 Pg.61-65
7	DNA Computing : Challenges and Applications	RAC Journal of Research	Vol.1 Issue 2 Pg. 5 – 9
8	An Integrated approach for the Secure Transmission of Images based on DNA Sequences	arXiv:1611.08252 2017	arXiv:1611.08252 2017
9	Towards the Secure Storage of Images on Multi-Cloud System	https://arxiv.org/ftp/arxiv/papers/1611/1611.07633.pdf	https://arxiv.org/ftp/arxiv/papers/1611/1611.07633.pdf
10	Detection of surface defects on ceramic tiles based on morphological techniques.	arXiv preprint arXiv:1607.06676	arXiv preprint arXiv:1607.06676
11	Towards the Generation of a Dynamic Key-Dependent S-Box to Enhance Security	Cryptology ePrint archive http://eprint.iacr.org/2015/092.pdf	Cryptology ePrint archive http://eprint.iacr.org/2015/092.pdf

RESOURCE PERSON			
S. No	Name of the Event	Name of the Sponsoring Agency	Date
1	UGC NET Awareness Programme	Scott Christian College, Nagercoil	16.03.2023
2	Bridge Course – “Key to Success in Life”	Annai Hajira College, Tirunelveli	17.09.2021
3	Valedictory Function, XPASO 20	St Xaviers College, Palayamkottai	07.12.2020
4	Intl. Conference on Soft Computing & Optimising Techniques	Kamaraj College, Tuticorin	09.08.2019
5	Intra College Technical Symposium EXCELSiOR’19	Sadakathullah Appa College, Tirunelveli	10.01.2019
6	Computer Science Association Meeting	Sadakathullah Appa College, Tirunelveli	15.10.2018
7	Computer Science Association Meeting	K.R.College of Arts & Science, Kovilpatti	04.10.2018
8	Computer Science Association Meeting	GVN College, Koilpatti	12.08.2015
9	One day Seminar	Sri Ram Nallamani Yadava College, Tenkasi	19.12.2014
10	Special care for Slow Learners – prevent College Dropouts	Kamarajar Govt Arts College, Surandai	12.03.2014
11	IT Association Meeting	Sadakathullah Appa College, Tirunelveli	31.08,2012

MEMBERSHIP		
Sl. No	Designation	Particulars
1	Member	Board of Studies (BSc Computer Science), Sarah Tucker College, Palayamkottai 2017 – 2020)
2	Member	Board of Studies (BSc Computer Science), Sadakatullah Appa College, Palayamkottai 2015 – 2018)
3	Member	Board of Studies (MPhil & Ph.D Computer Science), Manonmaniam Sundaranar University 2019 – 2022
4	Member	Board of Studies (MPhil & Ph.D Information Technology), Manonmaniam Sundaranar University 2019 – 2022
5	Member	Board of Studies (MSc.,MPhil & Ph.D Computer Science, Sadakatullah Appa College, Palayamkottai 2019 – 2022
6	Chairman	Board of Studies (UG & PG Information Technology), Manonmaniam Sundaranar University 2020 – 2023
7	Subject Expert	Board of Studies, (UG & PG Computer Science), St.Mary’s College, Thoothukudi District 2020-2023
8	Member	Board of Studies, (MCA), Sarah Tucker College, Palayamkottai 2020-2023

REVIEW COMMITTEE MEMBER	
Sl. No	Journal
1	Elsevier – Journal of Computers in Biology and Medicine
2	Elsevier – Journal of Mathematical BioSciences
3	Elsevier – Journal of Information Sciences
4	Elsevier – Journal of BioSystems
5	Journal of Economics and International Business Management
6	The Journal of Engineering
7	International Journal of Network Security
8	International Journal of Engineering & Technology
9	Transactions on Emerging Topics in Computing
10	Inderscience
11	IEEE
12	Academia.edu

CONFERENCES - PAPER PRESENTED: National (7) International (8)			
Sl. No	Name of the Event	Name of the Sponsoring Agency	Date
1.	First All India Conference of SRF	Scott Christian College, Nagercoil	Mar 13, 2004
2	Recent Trends in Information Systems	National Engineering College, Kovilpatti	Jan 6 – 8, 2006
3	Emerging Trends in Algorithms	St. Xaviers College, Palayamkottai	March 2 & 3, 2006
4	Vision '06 High Performance Computing	Government Engineering College, Tirunelveli	April 5, 2006
5	Issues and Trends in Advanced Computing	Bannari Amman Institute of Technology	May 19 & 20, 2006
6	Computer Science & Communication Technology	St. Josephs College, Tiruchirapalli	Feb 16 & 17, 2007
7	Emerging Trends in Knowledge Engineering	Thiagaraja College of Engineering, Madurai	Nov 26 & 27, 2010
8	Recent Trends in Discrete Mathematics	Nazareth Margoschis College	Dec 9 -11, 2010
9	Intelligent Computing Applications	Bharathiar University, Coimbatore	Mar 6 &7, 2013
10.	Advanced Computing	Sri Sarada College for Women, Tirunelveli	Jan 21, 2014
11	Advanced Technologies in Computing	Womens Christian College, Nagercoil	Feb 28, 2014
12	Recent Advancement in Information Technology Science and Engineering	A.P.C Mahalakshmi College, Tuticorin	Dec 14 & 15, 2017
13	Computational Intelligence	Sadakathullah Appa College, Tirunelveli	21-02-2018
14	Computational Science & its Applications	Sri S Ramasamy Naidu Memorial College, Sattur	16.03.2018
15	Artificial Intelligence, Smart Grid & Smart City Applications	PSG College of Technology, Coimbatore	04-01-2019

WEBMINARS ORGANIZED:

Sl. No	Name of the Event	Name of the Sponsoring Agency	Date
1.	Story Telling with Data	Rani Anna Government for Women, Tirunelveli	04.01.2021
2.	Tips & Tricks On Cracking Net Paper – I	Rani Anna Government for Women, Tirunelveli	23.06.2020

WEBMINARS ATTENDED:

Sl. No	Name of the Event	Name of the Sponsoring Agency	Date
1	Intelligence Automation in Infrastructure Services	Dr. Ambedkar Govt Arts College, Vyasarpadi, Chennai	31.05.2020
2	Exploring E - Learning Technologies	Annai Hajira Women's College, Tirunelveli	03.06.2020
3	Machine Learning & Artificial Intelligence	Sadakathullah Appa College, Tirunelveli	07.04.2021

WORKSHOP ATTENDED:

Sl. No	Name of the Event	Name of the Sponsoring Agency	Date
1.	Impact of Computers and Mathematics on IT	Sri Parasakthi College, Courtallam	Jan 9, 2003
2	Web Resource for Research and Web Page Design	St. Xavier's College, Palayamkottai	Dec 6 & 7, 2007
3	Personality Development & Effective Communication	St. Xavier's College, Palayamkottai	Dec 14 & 15, 2009
4	Workshop on Matlab	St. Xavier's College, Palayamkottai	Feb 4 & 5, 2011
5	Python for Research	Bharathiar University, Coimbatore	Dec 9 & 10, 2011
6	Research Avenues in Visual Cryptography	Einstein College of Engineering, Tirunelveli	Feb 9 & 10, 2012
7	Image Enhancement and Image Segmentation using Matlab	St. Xavier's Catholic College of Engineering, K K District	Jan 29 & 30, 2013
8	Optimization Techniques for Image Processing	Bharathiar University, Coimbatore	Mar 9 & 10, 2013
9	Hands on Approach to Proficient Document Writing using LaTeX	Anna University, Tirunelveli Region	Nov 12 & 13, 2013
10.	Big Data Analytics R- Tool	Madurai Kamaraj University	19.01.2018
11	Colloquium on Technology Enabled Learning	Manonmaniam Sundaranar University, IIT Bombay & MHRD New Delhi	19-04-2018

Date: April 6, 2023**NAME: Grasha Jacob**