

Dr. P. Alli, B.E., M.S., Ph.D.  
 Dean, Professor & Head/CSE  
 Velammal College of Engineering and Technology, Madurai  
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 Blog Address:

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### **Educational Qualification:**

<b>Degree</b>	<b>Branch/Specialization</b>	<b>Name of the College &amp; University</b>	<b>% of Marks / CGPA/ Class</b>	<b>Year of Passing</b>
Ph.D.	Medical Image Processing	Madurai Kamaraj University	-	2006
M.S	Software Systems	BITS Pilani	83	1996
B.E	ECE	Madras University	69	1990

### **Experience in Years: 26.7 Yrs**

<b>Name of the College / Industrial</b>	<b>Designation</b>	<b>Date of Joining</b>	<b>Date of Relieving</b>	<b>Experience</b>	
				<b>Years</b>	<b>Months</b>
Velammal College of Engineering and Technology	Dean & Professor & Head	2.5.2019	To Till Date	1	10
Velammal College of Engineering and Technology	Principal	01.07.17	1.5.2019	1	10
Velammal College of Engineering and Technology	Professor & Head	28.05.09	30.06.2017	7	11
Avinashilingam University, Coimbatore	Professor & Head	01.08.2007	27.05.2009	1	10
	Asst. Prof. & Head	01.07.2004	31.07.2007	3	1
	Senior Lecturer & Head	30.06.2002	30.06.2004	2	0
	Lecturer	30.06.1997	29.06.2002	5	0
Madurai Kamaraj University	Resource Person	01.04.1994	30.04.1997	3	1
<b>Total Experience</b>				<b>26</b>	<b>7</b>

### **Interested Research Areas:**

- **Image Processing**
- **Networking**
- **Information Security**

### Funded Research Works:

- Title of the Project: **Efficiente-waste management through coordinated web service using WS-Dependable space**  
Role Played / Playing: Principal Investigator  
Name of the funding agency: DST, New Delhi  
**Funding Amount: Rs. 16.09 lakhs**  
Start Date: December 2011
- Title of the Project: **Concentralized Solar Thermal (CST) Technology based System for Heat Applications**  
Role Played / Playing: Principal Investigator  
Name of the funding agency: MNRE  
**Funding Amount: Rs. 56.25 lakhs**
- Title of the Project: **Classification of Satellite Images using Cellular Automata**  
Role Played / Playing: Co-PI  
Name of the funding agency: RESPOND, ISRO  
**Funding Amount: Rs. 16.45 lakhs**

### Students' Projects Grant:

S. No	Name of the Student	Name of the Project and Agency	Prizes awarded
1.	Mr. K. Abraham, Mr. A. Sri Venkateshwaran, 2010-14 batch, Mr. S. Vikramraj, 2011-15 batch	The Institute of Engineers (India) – IEI for Project titled “Development of Ground Station with Wireless Telemetry”	<b>Rs. 50, 000</b>
2.	Ms. S. Sree Naga Vani, Ms. S. Sree Naga Gowri, Ms. S. Sri Nandhini, 2012-16 batch	The Institute of Engineers (India) – IEI for Project titled “Development and Designing an Ergonomic Computer Mouse”	<b>Rs. 20, 000</b>
3.	Mr.T.K.S.Harish Ganapathy, 20113-17 batch, Mr. A.Thanga Ayyanar, 2014-18batch	Innovation and Entrepreneurship Development Center - (IEDC)for Project titled “Intelligent Kart for Queue less and Effortless Billing”	<b>Rs. 1,00, 000</b>

**Publications Details:****Book Publications: 4 Books and 2 Chapters**

S.No	Title	Publisher
1.	Introduction to Visual Programming	Jayalakshmi Publications (ISBN 978-93-86712-16-5)
2.	Published a book chapter titled “Optimal-Feature-Selection-and-Extraction for eye disease diagnosis” in book “Medical Image Processing for Improved Clinical Diagnosis”	IGI GLOBAL Publishers, USA, August 2018
3.	Published a book chapter titled ““An Integrated GIS and Knowledge-Based Automated Decision Support System for Precision Agriculture Using IoT” in book “IoT and WSN Applications for Modern Agricultural Advancements	IGI GLOBAL Publishers, July 2019
3.	Artificial Intelligence	VSRD Academic Publishing ISBN-13: 978-93-87610-46-0 First Edition, November 2019
4.	Human Rights	Publisher: Technical Publications, ISBN: 9789390041725, September 2020
5.	Foundation Skills in Integrated Product Development	Publisher: Technical Publications ISBN – 9789333221436 November 2020

**National / International Journals: 43**

S. No.	Title of the Paper	Journal Name	Vol. No. Issue No. Month & Year of Publication
1.	An Image Enhancement System for Feature Recognition in Electron Magnetic Resonance Tomograms	CiiT International Journals of Digital Image Processing	ISSN: 0974–9691 Vol. 1, No. 1 April 2009
2.	Application of KDD for Rule Analysisbased on Rough Set Theory	International Journal on Computer Engineering and Software Technology	ISSN : 0974-3898 P. No. 1-9 June 2010
3.	Oil Spills Detection in SAR Images using Non-Linear Fuzzy Filter	International Journal of Advanced Science & Technology	ISSN: 2005-4238 P. No. 7-16Vol. 25 December 2010
4.	Integrating Sensor Networks with Grid for Quality Control in Food Processing Units	Asian Journal of Computer Science and Information Technology	ISSN 2249-5126 P. No 112-115 Vol. 1, No. 42011
5.	A Study on Stock Market Analysis for Stock Selection – Naïve Investors’ Perspective using Data Mining Technique	International Journal of Computer Applications	ISSN 0975-8887 P.No. 19-25 Vol. 34, No. 3November 2011
6.	An Analysis and Overview of Wireless Routing Protocols	Journal of Computer Science	ISSN: 1549-3636 P. No. 393-397 2012
7.	A Review on Recent Research and Implementation Methodologies on	Journal of Computer Science	ISSN 1549-3636 P. No.170-174,

	Medical Image Segmentation		Vol. 8, No. 1Jan 2012
8.	Retinal Image Analysis for Abnormality Detection-An Overview	Journal of Computer Science	ISSN 1549-3636 P. No. 436-442, Vol. 8, No. 3Jan 2012
9.	An Overview of Research Issues in the Modern Healthcare Monitoring System Design using Wireless Body Area Network	American Journal of Applied Sciences	ISSN. 1546-9239 P. No. 54-59 Vol. 9, No. 1January 2012
10.	An Analysis and Overview of Modern Digital Watermarking	American Journal of Applied Sciences	ISSN 1546-9239 P. No 66-70, Vol. 9, No. 1February 2012
11.	Distributed Data mining in Grid Environment	International Journal of Engineering and Innovative Technology	ISSN:2277-3754 P. No. 240-243 Vol. 2, No. 1July 2012
12.	Energy efficient rekeying approach for dynamic membership changes in Group Key Management	European Journal of Scientific Research	ISSN 1450-216X September 2012
13.	An Effective Time Series Analysis for Stock Trend Prediction Using ARIMA Model for NiftyMidcap-50	International Journal of Data Mining & Knowledge Management Process	ISSN 2230-9608 Page: 65 – 78, Vol. 3, No. 1 January 2013
14.	A Reliable Classifier Model Using Datamining Approach For Heart Disease Prediction	International Journal of Advanced Research in Computer Science and Software Engineering	ISSN:2277 128X P. No 20-24 Vol. 3, No. 3 March 2013
15.	Novel Framework for the Portfolio Determination using PSO Adopted Clustering Technique	Journal of Theoretical and Applied Information Technology	ISSN:1992-8645 P. No. 131-141, Vol. 64, No. 1 June 2014
16.	A Hybrid Ad hoc Routing Protocol Based on a Modified Dijkstra's Algorithm	EURASIP Journal on Wireless Communications and Networking	June 2014 doi:10.1186/1687-1499-2014-90
17.	Removing Speckle Noise In Synthetic Aperture Radar(SAR)Images	International Journal of Applied Engineering Research	ISSN 0973-4562 Volume 9,No 24(2014) PP.26007-26018
18.	Performance Improvisation and Energy Conservation Using DSGC Protocol in Sensor Based Smart Grids	Australian Journal of Basic and Applied Sciences	ISSN:1991-8178 Vol.8, No.10, Pages: 166-174 July 2014
19.	Enhancement of the Portfolio Determination using MultiObjective Optimization	International Journal of Computer Sciences and Engineering	Vol.-2(10), PP(67-75) Oct 2014
20.	Authentication of Healthcare Information Exchange using Discrete Cosine Transform	International Journal of Advanced and Innovative Research	Vol. 4, Issue. 5 May 2015
21.	NISD: A Node ID based Secure Detection and Isolation System for OLSR Routing Protocol in MANETs	Australian Journal of Basic and Applied Sciences	June 2015 ISSN: 1991-8178 Page. No. 149-159 Vol. 9 No. 11
22.	A Nonlocal Filtering with Coherence Vector based Weights for SAR Denoising	Australian Journal of Basic and Applied Sciences	August 2015 ISSN: 1991-8178 Page. No. 487-496

			Vol. 9 No. 27
23.	An Optimal Top-Hat Mathematical Transform and Fuzzy based Clustering for Eye Disease Diagnosis	Australian Journal of Basic and Applied Sciences	Vol 9(20), pp: 51-59 Annexure II-0.244 2015
24.	Diagnosing and Ranking Retinopathy Disease Level using Diabetic Fundus Image Recuperation Approach	The Scientific World Journal	Vol. 2015
25.	Efficient Energy Conservation in MANET using Energy Conserving Advanced Optimized Link State Routing Model	International Journal of Parallel, Emergent and Distributed Systems (Taylor & Francis Production)	ISBN: 978-1-61804-344-3 Page: 264-270 DOI: 10.1080/17445760.2015.1103850
26.	Cost-effective polynomial based multicast–unicast key distribution framework for secure group communication in IPv6 multicast networks	IET(The Institution of Engineering and Journals)	ISSN 1751-8709 Jan 2016
27.	Enabling Resource Awareness in Integrated Sensor Grid Framework Using Cross Layer Scheduling Mechanism	Journal of Circuits and Systems	Vol. 7, No. 10, August 2016
28.	Despeckling of SAR Images Using Intensity Coherence Vector	Asian Journal of Information Technology	2016 Page No.518-532 Vol 15 No.3
29.	Cost effective multicast - unicast based key management for secure group communication	Journal of Advances in Natural and Applied Sciences	August 2016
30.	Spectral Classifier with Predictive Rules for Diagnosis and Early Detection of Diabetic Retinopathy on Digital Fundus Image	Advances in Natural and Applied Sciences	Vol. 10(13) pp. 22-32 Annexure-II-0.172
31.	Improving the Performance for Edge based Image Compression using Various Techniques	Asian Journal of Information and Technology	pp. 148-152 Annexure I-0.053
32.	Automated Detection of Retinal Lesions in Digital Retinal Images for Grading of Diabetic Retinopathy	Asian Journal of Information and Technology	15(6):1015-1022 ISSN: 1682-3915
33.	A Feature Fusion Approach Classify Diabetic Retinopathy with Modified Support Vector Machine	Research Journal of Bio-Technology	Vol. (Special Issue:II) August 2017
34.	Feeding Big Data for Enhanced Search Engine Applications	International Journal of Computer Science	Volume 5, Issue 1, No. 27, 2017 pp. 1870-1879
35.	A Machine Learning Ensemble Classifier for Early Prediction of Diabetic Retinopathy	Journal of Medical Systems	09.11.17 ISSN: 0148-5598
36.	Optimizing Task, Memory and Energy of Wireless Sensor Grids using Grid Cluster Multi-level Priority Scheduling	Asian Journal of Research in Social Sciences and Humanities	Vol. 7. No. 3 pp. 382-396

37.	Turtle edge encoding and flood fill based image compression scheme	Springer	16.02.18 DOI 10.1007/s10586-018-1994-5
38.	Pattern-based Chain Code for Bi-Level Shape Image Compression	TAGA Journal	Vol 14. pp. 3064-3080
39.	Feature Selection and Parameters Optimization of Support Vector Machines based on Hybrid Glowworm Swarm Optimization for Classification of Diabetic Retinopathy	Journal of Medical Systems, Springer	ISSN: 0148-5598 E- ISSN: 1573-689X
40.	Concept Aware Related Forum Post Retrieval Framework with Increased User Satisfaction Level	Applied Mathematics and Information Sciences	ISSN: 1935-0090 doi:10.18576/amis/13 S134
41.	Trust based approach and risk management for IT systems in Cloud Services selection	Wireless Personal Communication	ISSN:0929-6212
42.	Study of the Importance of Digital Forensics And Deep Learning Tools	International Journal of Advanced Science and Technology	Vol. 28, No. 20, (2019), pp. 963-978, ISSN: 2005-4238(Print), ISSN: 2207-6360 (Online) H Index: 4. (SCOPUS Indexed Journal)
43.	Satellite Image Classification Using Cellular Automata	International Journal of Image and Graphics	<a href="https://doi.org/10.1142/S0219467821500145">https://doi.org/10.1142/S0219467821500145</a>

#### National/International Conferences: 19

S. No.	Title of the Paper	Name of the Conferences	Date of Publication
1.	Optimal Adaptive Filter for EDR Image	National Conference on “Distributed Database and Computing”	28.03.04 & 29.03.04
2.	Contrast Enhancement of Electron Magnetic Resonance Images using Linear and Nonlinear Unsharp Masking Techniques	Indian Conference on Computer Vision, Graphics and Image Processing	16.12.04 to 18.12.04
3.	An Unified Regularization and Diffusion Approach to Image Enhancement & Feature Identification	International Conference on Soft Computing Techniques in Engineering	24.01.07 & 25.01.07
4.	Secure Data Communication in Mobile Ad-hoc Networks using SMT protocol	National Conference on “Information Systems and Computer Engineering”	05.10.07 & 06.10.07
5.	Adaptive Fuzzy Control Approach for Enhancement of Electron Magnetic Resonance Tomograms	International Conference on Computational Intelligence and Multimedia Applications	ISBN:0-7695-3050-8 P. No. 349-354 December 07
6.	Perspective Analysis on Single and	National Conference on	13.03.2009

	Dual Neighborset Routing in Mobile Ad Hoc Networks	Emerging Trends in Computer Science	
7.	Dynamic Key Management to minimize Communication Latency for Efficient Group Communication	International Conference on Computers, Communication and Intelligence	22.07.10 & 23.07.10
8.	Rule Analysis based on Rough Set Data Mining Technique	International Conference on Computers, Communication and Intelligence	22.07.10 & 23.07.10
9.	Sensor Grid for Monitoring Air Pollution	International Conference – EMICS at Maria College of Engineering and Technology	February 2012
10.	Communication Efficient Distributed Decentralized Key Management Framework For Message Authentication In VANET	International Conference on Communication Network and Computing	24.02.12 to 25.02.12
11.	Heart Disease Diagnosis Using Data mining Classification Techniques	National Conference on Information and Network Management at Kamaraj College of Engineering & Technology, Virudhunagar	05.04.13
12.	Knowledge Based Analysis For Disease Diagnosis Using Data mining Techniques	National Conference on Electrical and Instrumentation Systems in Government College of Technology, Coimbatore	13.04.13
13.	Abnormality Detection in Retinal Images using Unsupervised Learning Techniques	International Conference on Intelligent Instrumentation, Optimization and Signal Processing	May 2013
14.	An Optimized Approach to predict the Stock market behavior and Investment Decision making using Benchmark Algorithms for Naive Investors	IEEE International Conference on Computational Intelligence and Computing Research at Vickram College of Engineering, Madurai	26.12.13 to 28.12.13
15.	Secure Healthcare Information Exchange using Reversible Data Hiding	National Conference on Advances in Computing Technologies	03.03.15
16.	An Authentication Scheme for Medical Information Exchange using Reversible Data Hiding	International Conference on Emerging Trends in Scientific Computing and Security Systems	26.03.15
17.	A Cost Effective Decentralized sub Group Key Management Framework For Secure IPV6 Multicast Communications	National conference on “Research Challenges in SMAC” – 2016	29.01.16
18.	Finding ‘RIGHT DATA’ from the BIG DATA	Indian Institute Of Management, Bangalore	17.12.15 to 19.12.15
19.	Improved Feature based Sentiment Analysis for online customer reviews	International Conference on Innovative Data Communication Technologies and Application	October 2019

**Programmes (Conference/FDP/Seminar/Workshop)Attended**

<b>S.No.</b>	<b>Title of the Programme</b>	<b>Sponsor / Organizer with Place</b>	<b>Date (Duration in No. of Days)</b>
1.	National Symposium on Advanced Computing and Networking Technologies	Avinashilingam Deemed University, Coimbatore	28.01.00 & 29.01.00
2.	Training Programme on Genetic Algorithms in Engineering Applications	Coimbatore Institute of Technology, Coimbatore	19.11.2001 to 02.12.2001
3.	Seminar on Current Trends in Communication Network	SNR Sons College, Coimbatore	10.06.2002 & 11.06.2002
4.	Short Term Course on GNU/Linux Operating System	Model Engineering College, Kerala	05.08.2002 to 18.08.2002
5.	National Seminar on Technology Trends Present and Future	Avinashilingam Institute for Home Science and Higher Education for Women	19.12.2002
6.	National Seminar on Reaching the Unreached-A Challenge to Technical Education	Kumaraguru College of Technology, Coimbatore	27.12.2003 to 30.12.2003
7.	Training Programme on Soft Computing Models for Engineering Applications	PSG College of Technology, Coimbatore	28.03.2004 to 10.04.2004
8.	CISCO Networking Academy Conference	Amritha Vishwa Vidya Peetham Deemed University, Coimbatore	28.06.2004 & 29.06.2004
9.	4th Indian Conference on Computer Vision, Graphics and Image Processing	Indian Statistical Institute, Kolkata	16.12.04 to 18.12.04
10.	National Seminar on Digital Image Processing Techniques for Engineering Applications	VCET, Madurai	24.09.2009
11.	Mission 10X Workshop	VCET, Madurai	23.11.2009 to 27.11.2009
12.	National Level Seminar on Modern Construction Practices in Steel and Concrete	VCET, Madurai	18.12.2009
13.	Mission 10X Learning Approach Practitioners	VCET, Madurai	29.03.10 & 30.03.10
14.	FDP on “Team Building and Leadership Skills”	VCET, Madurai	04.02.2012
15.	Faculty Development Programme titled “Recent Trends in Computing Sciences”	Royal College of Engineering and Technology, Kerala	03.06.13 to 14.06.13
16.	Two Day Leadership Training Program for Women Officials	VCET, Madurai	22.05.15 & 23.05.15
17.	Attended One Day Workshop “Kanithamil Palarangam”	Tamil Virtual Academy, Chennai and Madurai Kamaraj University, Madurai	09.08.15
18.	Attended One Day Workshop “HEALTH IN YOUR HAND”	VCET, Madurai	21.09.16
19.	Attended Syllabus Sub Committee Meeting of the Faculty of ICE	Anna University, Chennai	07.11.17



**Programmes (Conference/Seminar/Workshop/FDP)Organized**

<b>Name of the Programme</b>	<b>Name of the Host</b>	<b>Date</b>
International Conference on Computers, Communication and Intelligence- ICCCI' 10	VCET, Madurai	22.07.2010 & 23.07.2010
National Level Research Seminar on Computational Intelligence and Cloud Computing	VCET, Madurai	12.11.2010 & 13.11.2010
Training Programme on Computer Literacy	Staff Training Centre, Madurai	25.06.2012 to 28.06.2012
Completed certification on "MOODLE TEST FOR TEACHERS" offered by the Spoken Tutorial Project	IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India	December 13, 2019
AICTE (ATAL) Academy Online FDP on "Internet of Things(IoT)"	Institute of Engineering, Lucknow	29.10.2020 To 02.11.2020

1. Courses / Certificates Done :CCNA, CISCO

2. Invited talk or Guest Lecture:

Taught Computer Language for the students	13.09.94 to 31.06.94	ArulmiguPalaniandavar Arts College for Women
Delivered valedictory address in the national level technical symposium by the department of Computer Science & Engineering	9th October 2010	Dept of CSE, KLN College of Information Technology, Madurai
Delivered a lecture in three day FDP on Research Methodologies	12.03.13 to 14.03.13	VCET, Madurai
Delivered a lecture on "Mobile and Pervasive Computing" in the AICTE Sponsored National Level Seminar on Pervasive Computing Technologies	24.04.13 to 26.04.13	Kings College of Engineering, Punalkulam
Delivered a lecture in the FDP titled "Adaptive Filters for Electron Magnetic Resonance Images"	19.05.15	MepcoSchlenk Engineering College, Sivakasi
Delivered a Key note address in 11 th National Conference on "Innovations in Computing & Information Technology (NCICIT'16)"	27.12.16	Kings College of Engineering, Punalkulam
Delivered a lecture on "Criteria-III "for Two day FDP on "NBA- Accreditation Process"	03-02- 17 to 04-02- 17	VCET, Madurai

3. Professional Memberships : ISTE,CSI,IEEE,IEE

4. Any other responsibilities:

- Authorized lecturer / Academy lead for CISCO Networking Academy
- Ph.D supervisor in
  - Anna University Chennai
  - ManonmaniamSundaranar University
  - Number of Research Scholars: 11
- Acting as a Board of studies member for Anna University, Chennai
- Acting as Doctoral Committee Member for Ph.D. Research Scholars
- Journal Reviewer for IAENG International Journal of Computer Science
- Acted as a Board of studies member for Computer Hardware and Software Engineering at Avinashilingam Institute for Home Science and Higher Education for Women
- Served as visiting professor in IFM (Institute of Finance Management) Dar-es-salaam, Tanzania, East Africa for 5 Years
- Designed and implemented the following Labs for the Department of Computer Science and Engineering and Department of Information Technology.
  - Software lab – I and II
  - Linux Lab
  - High Performance Network Lab in Collaboration with CISCO Networking Academy
  - Multi Media Lab
- Designed and implemented the whole campus network for the Faculty of Engineering
- Completed “Oracle 7.1 with Developer 2000” exam from IISc on 10.10.1998
- Completed PGDCA exam at Madurai Kamaraj University during May 1993.
- Involved in maintaining the website for Faculty of Engineering.
- Involved in providing Video conferencing facility for Faculty of engineering from Main Campus