

Prof.A.ALLIRANI,
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Name : Prof. Dr. A. Allirani
Date of Birth : 25th March 1961
Name of the Institution previously Worked : SRS College of Engineering and Technology.
Department : Electronics and Communication Engineering.
Field of Specialization : Digital Signal Processing & Wireless Sensor Networks
Academic Qualifications : ME, Ph.D.
Total Working Experience : 30 Years
R&D and Teaching Experience : 10 Years & 25 Years
Industrial Experience : 5 Years, 8 Months
Industry Experience : Deputy Manager (Planning & control Divn.)
CNC Systems Mfg Division,
HMT Limited, Bangalore.

Academic Qualifications:

Degree	Year of Passing	Institution
BE. (ECE)	1983	College of Engineering, Guindy, Chennai
M.E. (Communication Systems)	1993	Regional Engineering College, Trichy
Ph.D (Wireless Sensor Networks)	2009	AnnaUniversity, Chennai

Academic and Industrial Experience: 30 Years

Industry / Institution	Post held	Period
HMT Limited,CNC Systems Mfg. Divn, Bangalore	Deputy Engineer(Design & Development)	Oct 1984 to Feb 1987
HMT Limited,CNC Systems Mfg. Divn,Bangalore	Deputy Manager (Planning and Control)	Oct 1987 to Feb 1989
MookambigaiCollege of Engineering	Lecturer	Feb 1989 to Jan 1994
Srinivasa Polytechnic College	Principal	Jan 1994 to Oct 1998
Mookambigai College of Engineering	Asst. Professor/HOD	Aug 19 95 to Oct 2000
MAM College of Engineering	Professor/HOD	Oct 2000 to June 2001
OxfordCollege of Engineering	Professor/HOD	June 2001 to July 2002
MNSK College of Engineering	Principal	July 2002 to May 2003
PavendharBharathidasan College of En Gineering	Professor/HOD	May 2003 to Nov 2003
Kurinji College of Engg& Tech	Professor/HOD	Nov 2003 to Nov 2004
SonaCollege of Technology	Professor/HOD	Dec2004 to May2009
SRS College of Engineering & Technology, Kuppanur,	Principal	Aug 2009 to May 2014
CARE Group of Institutions, Trichirappalli	Dean/Professor	May 2014 to till date

Subjects taught at Under Graduate Level: Signals and Systems, DSP, Microwave Engg, Electromagnetic Waves and Wave-guides, etc.

Post Graduate Level: ADSP, Microwave Integrated Circuits

Projects carried out: More than 100 UG Projects & 10 PG Projects

No. of Books published with details: 1

S.No	Name of the staff	Name of the Book	Publisher	Status
1.	Prof.A.ALLIRANI	Transmission Lines and wave guides	Sona University	Published

Awards/prizes won

1. **Best Principal Award (National Award)** for the year 2011 by Global Achievers Foundation, New Delhi
2. Got **FIRST PRIZE** in All India Student's Paper Contest conducted by IEEE India chapter in the name M.V.Chauhan Award (**National Award**) for the paper titled "Adaptive Filtering in Smart Hearing Aid System for Impaired people" in the year 2007
3. Project Guided by Prof A.Allirani and done by Mr.N.Prabakaran, won the **SECOND PRIZE** in the L&T best M.TECH thesis contest awarded by ISTE (**National Award**) for year 2007,
4. Award as **one of the first five best Projects**(National Level) for the UG project "Temperature Monitoring System of Autoclave Equipment in Food Packing Industries" for the year 2004 -2005 and issued by Confederation of Indian Industry (CII)
5. Nominee of the (**Meritorious Educational Excellence National Award**) for the year 2002.
6. **Best Project Award by DTE**, Chennai, for the year 1995 – Uninterrupted Power Supply
7. **National merit scholarship** award for SSLC Marks – State 12th rank
8. As **Anna University Ball Badminton player** represented university at the national level and won many prizes.

Academic and Research contributions:

- 1) Acted as a **member in Board of studies of Bharathidasan University** for more than 5 **years**.
- 2) Acted as **Joint Management Representative (JMR) of ISO team in Sona College of Technology** for teaching-learning process and Extra-curricular and Co-curricular Activities and developed process manuals for the same.
- 3) Acted as **Chief Superintendent for more than 25 times** for conducting university Theory and Practical examinations.
- 4) Organized sports meets such as **TIES, IPAA Meet, Bharathidasan University sports meet** in Mookambigai College of Engg and Srinivasa Polytechnic College, Keeranur
- 5) Organized more than **30 national level symposiums, seminars and conferences** and one international conference.
- 6) **Twice received best NSS Unit Award from DTE**, Chennai during my tenure as Principal of Srinivasa Polytechnic College, Keeranur.

- 7) Guided more than 100 projects in UG level and 10 projects in PG level.
Published 2 technical research papers in national conferences and 4 technical research papers in international conferences and 3 research papers in international journals.
- 8) Acted as chair for technical sessions in many national symposiums and conferences.
- 9) Published a paper on **“Woman Empowerment”** in ISTE national convention at Bannari Amman Institute, Sathyamangalam and also acted as a chair for one session.
- 10) Started many **Women Self Help Groups** as one of the NSS Activity in nearby villages of Srinivasa Polytechnic Collge, Keeranur and implemented many projects with the help of Indian Bank, Neerpalani Village. **This idea was implemented during the period 1994-1998, even before the govt. initiatives.**
- 11) Published one **social relevance paper on ICT in Rural India in International Conference at New Delhi conducted by IGNOU, New Delhi**
- 12) **Obtained 100% results many times in various subjects handled**
- 13) Counseled staff and Students to improve their performance in both academic and personal Career
- 14) Acted as cultural club coordinator and conducted various Programs (both National level and State level) to improve the skill sets of the students.
- 15) Designed a PCB layout and fabricated the same for Hall Sensor in ISRO project.
- 16) Acted as President of Department Technical Association
- 17) **Produced 7 Anna University, Chennai rank holders during my 4 years tenure in Sona College of Technology**
- 18) **Arranged many Placement Training Programs for the students and achieved Max. placement results (97%) in the Department of ECE, Sona College of Tech.**

Memberships of professionals/learned bodies/societies:

- 1) IEEE Member 80407831
- 2) ISTE Life Time Member: L M 34058
- 3) FIETE Fellow Member: F-198412; Immediate Past Chairman – Salem sub-Centre
- 4) FIE

Research Publications:

Journal Publications

1. Dr.A.Alli Rani and Dr. M.Suganthi (2008) “An Energy Sorting Protocol (ESP) with low energy and low latency in wireless sensor networks.” International Journal of Computer Science and Network Security (IJCSNS). Print ISSN No: 1738-7906. Vol:8 No:11 pp: 208-214, www.ijcsns.org
2. Dr.A.Alli Rani and Dr.M.Suganthi. (2009) “An efficient clustering protocol with reduced energy and latency for wireless sensor network”. Lecture Notes in Computer Science, (LNCS), Part I, Print ISSN No: 0302-9743 Vol: 5592 pp: 797-809. Springer verlag, Berlin, Heidelberg. Publishers: Springer www.link.springer.com
3. Dr.A.Alli Rani and Dr.M.Suganthi (2009) “An energy efficient cluster formation protocol with low latency in wireless sensor networks”. International journal of World Academy of Science, Engineering and Technology (WASET), Hongkong. Print ISSN No: 1307-6892, Vol: 3 No: 3, pp: 1-7
4. Ms.T.S.UdhayaSuriya and Dr.A.Alli Rani (2012) “Delay Anlysis of MAC’. International Journal of Computing Science and Communication Technologies (IJCSCT) ISSN No: 0974-3375 Vol: 5 No: 1 pp: 810-814 July2012 www.techniajournal.com.
5. M.Lakshmi and Dr.A.Alli Rani (2013) “Near lossless compression technique for Bayer color filter images using wavelets”. International Journal of Computer Applications (IJCA). Vol: 69 Issue: 12 pp: 1-4 ISSN No: 0975-8887 www.ijcaonline.org Appear in www.adsabs.harvard.edu also.
6. M.lakshmi,Dr.A.Alli Rani and N.J.R.Muniraj (2014) “ A survey of CFA image compression performance”. Elixir International Journal category: computing and Informatics Subcatagory: Digital Processing ISSN No: 2229-712X www.elixirpublishers.com
7. Ms. K.Thenmalar and Dr.A.Alli Rani (2013) “Optimization Techniques for the Economic Dispatch Problem in various generation plants”. Periodical: Advanced Materials Research (AMR). Vol: 768 ISSN print: 1022-6680 ISSN cd: 1022-6680 ISSN Web: 1662-8985 pp: 323-328, Oct 2013. www.scientific.net/AMR.768.323
8. Dr. Alli Rani.A, ME., Ph.D(2015) “A new energy efficient communication protocol (NEEP) for wireless sensor networks”. International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 14 (2015) pp 34618-34624 © Research India Publications. www.ripublication.com

Conference Publications

1. A.Alli Rani, A.Paramasivam and R.S.D.Wahidha Banu (2006), “Energy sorting protocol for wireless sensor networks”. Proceedings of National Conference on Current Trends in Technology (NUCONE 2006), Print ISBN No: 978-81-8424-140-2, pp: 370-375. Allied Publishers
2. A.Alli Rani, A.Paramasivam and M.Suganthi (2007) “HIP- Application specific algorithm in wireless sensor networks”. Proceeding of International Conference on ADNACED Computing and Communcation (ICACC 2007), Print ISBN No: 978-81-8371-066-2, pp: 525-528.
3. A.Alli Rani, A.Paramasivam and M.Suganthi (2007) “HACE- Algorithm for cluster head selection in wireless sensor networks”. Proceedinga of National Conference INDIACom 2007, computing for nation development. Print ISBN No: 978-81-904526-0-1, Print ISSN No: 0973-7529, pp: 217-220.
4. Dr.A.Alli Rani and Dr.M.Suganthi (2009) “An energy sorting protocol with reduced energy and latency for wireless sensor network”. International Advanced Computing Conference (IACC 2009). ISBN print: 978-1-4244-2927-1.pp:1562-1568 www.ieeeexplore.ieee.org
5. Dr.A.Alli Rani and Dr.M.Sugathi (2009) “An efficient clustering protocol with reduced energy and latency for wireless sensor network”. International Conference on Computational Science and its Application (ICCSA 2009). ISBN print: 978-3-642-02453-5 pp: 792-809. Also www.dl.acm.org/citation
6. T.Kalaivani, Dr.A.Alli Rani and P.Priya (2011) “A survey on Zigbee based wireless sensor networks in Agriculture”. National Conference on Trends in Information science (TISC 2011). ISBN print: 978-1-4673-0134-3. pp: 85-89. Publishers: IEEE www.ieeeexplore.ieee.org
7. A.Kumaran and A.Alli Rani (2011) “Location of FACTS devices for Real and Reactive power flow control”. International Proceedings of Computer Science and Information Technology (IPCSIT 2011) Print ISSN No:2010-460X Vol:21 pp:242-248. www.iacsit.org.
8. P.Priya, Dr.A.Alli Rani and T.Kalaivani (2012) “A comparative study on energy efficient protocols used in wireless sensor networks”. National Conference on Emerging Trends and Applications in Computer Science (NCETACS 2012). Print ISBN: 978-1-4577-0749-0 pp: 225-229.Publishers: IEEE www.ieeeexplore.ieee.org
9. K.Thenmalar and Dr.A.Alli Rani (2012) “Online power factor correction using distributed control system”. 2nd International Conference on Advances in Engineering and Technology (ICAET 2012). EGS Pilly Engineering College.

10. K.Thenmalar and Dr.A.Alli Rani (2012) “A new approach to the solution of Economic Dispatch using particle swarm optimization with simulated annealing”. IEEE,IETE,ISTE (ICTACT 2012).
11. K.Thenmalar and Dr.A.Alli Rani (2013) “Particle swarm optimization scheme for the solution of economic dispatch” 7th international conference on intelligent systems and control (ISCO 2013). Print ISBN No: 978-1-4673-4359-6 pp: 143-147 Jan2013. Publisher: IEEE www.ieeeexplore.ieee.org
12. S.Saraswathi and Dr.A.Alli Rani (2013) “Survey on image segmentation via clustering”. International conference on Information, Communication and Embedded System (ICICES 2013) Feb2013 Print ISBN No: 978-1-4673-5786-9 pp: 331-335 Publisher: IEEE www.ieeeexplore.ieee.org.
13. S.Muniappan, Dr.A.Alli Rani and S.Saraswathi “A novel approach for image enhancement by using contrast limited adaptive histogram equalization method”. 4th International Conference on Computing, Communications and Network Technologies (ICCCNT 2013) July 2013 Print ISBN No:978-1-4799-3925-1 pp: 1-6 Publisher: IEEE www.ieeeexplore.ieee.org
14. K.Thenmalar and Dr.A.Alli Rani (2013) “Solution of firefly algorithm for the economic thermal power dispatch with emission constraint in various generation plants”. International Conference on Computing, Communication and Network Technologies (ICCCNT 2013) July 2013. Print ISBN: 978-1-4799-3925-1 pp: 1-7 Publisher: IEEE www.ieeeexplore.ieee.org
15. T.S.UdhayaSuriya and Dr.A.Alli Rani (2013) “Low power analysis of MAC using Modified Booth Algorithm” 4th International Conference Computing, Communications and Network Technologies (ICCCNT 2013) July2013 Print ISBN No: 978-1-4799-3927-5 pp: 75-79

No. of Projects completed as Project Coordinator/ Co-investigator

S.No	Name of the Funding agency	Name of the Scheme	Programme Title	Year of Funding	Duration	Amount Sanctioned	Status Completed/ Ongoing
1	Sona Management Salem, Tamilnadu	Research Promotion Scheme	Enhancement of the Public convenience in Indian Railways	2005-2006	6 months	Rs.3,000	Completed
2	Sona Management Salem, Tamilnadu	Research Promotion Scheme	Remote Control of Electrical devices using Mobile Phones & Microcontroller	2005-2006	6 months	Rs.3,000	Completed
3	Sona Management Salem, Tamilnadu	Research Promotion Scheme	Denomination Detector and Counter	2006-2007	6 months	Rs.3,000	Completed

4	Sona Management Salem, Tamilnadu	Research Promotion Scheme	Intelligent Vehicle	2006-2007	6 months	Rs.25,000	Completed and Patent applied
5	Sona Management Salem, Tamilnadu	Research Promotion Scheme	Smart Water Level Controller	2006-2007	6 months	Rs.2,000	Completed

Revenue Generated Through Continuing Education:

S.No	Name of the Course	Period	Revenue in Rs
1.	Short term course on PCB Design and Fabrication course (1)	60 Hours	19,000.00
2.	Short term course on PCB Design and Fabrication course (2)	60 Hours	27,500.00
3.	Short term course on Advanced course on Micro Controller	60 Hours	1, 14,000.00

List of faculty development programs conducted by the department:

S.No	Date	Topic / Venue	Resources Persons
1	10, 11 Dec 2007	MATLAB and its application	Mr.Raghuram, Raghuram Associates, Chennai
2	July 9 to 13 2007	VLSI and its application	Mr.Paresh Patel, MD, SLS Corporation, USA.
3	July – Sep. 2009	Embedded System Design	Prof.B.Gopi, AP/ECE

Funds Received During My Tenure at Sona College of Technology

S.No	Project Name	Amount Received Rs in lacs	Year	Name of Agency	Principal Investigator
1	MODROB-Modernization of VLSI Lab	5.00	2005-2006	AICTE, New Delhi	Prof.A.Allirani
2	Fabric Defect Detection in Silk Industries	3.00	2008-2009	AICTE, New Delhi	Prof R.S.Sabeenian