

PANCHAMI . V
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EDUCATIONAL QUALIFICATIONS

Examination	Specialization	University/ Institution	Year
Phd (Submitted Thesis)	Cryptography And Data Security	Anna University, Chennai Tamil Nadu, India	2018*
M.Tech	Computer Science	Govt. College Of Engineering, Salem, Tamil Nadu	2009
B.Tech	Information Technology	Muslim Association College of Engineering, Thiruvananthapuram, Kerala	2007
HSE	Computer Science	State Board , Kerala	2003
SSLC	General Category	State Board ,Kerala	2001

*-till date

EXPERIENCE : ACADEMIC EXPERIENCE

Total Teaching Experience: 08 years

Sl. No.	Title of position	Field of Specialization	Name of Institution	Period		Experience in years
				From	To	
1	Asst. Professor	Computer Science and Engineering	Toc H Institute of Science and Technology	24/06/2010	Till Date	8 years
2	Asst. Professor	Information Technology	Matha College of Technology	06/06/2009	22/06/2010	1 year

Academic Experience	Toc H Institute of Science and Technology	Matha College of Technology
PG Experience (M.Tech in Data Security)	5 years	Nil
UG (B.Tech in Computer Science)	7 years	Nil
UG(B.Tech in Information Technology)	Nil	1year

List of subjects handled:	<ol style="list-style-type: none"> 1. Database Security 2. Number Theory and Coding Theory 3. Principles of Database and Design 4. Security In Computing 5. Computer Programming and Numerical Methods 6. Cryptography and Network Security 7. System Programming 8. Neural Networks 9. C Programming 10. Principles of Programming Language 11. Mobile Computing 12. Object Oriented Modelling and Design (OOMD)
Academic Student Projects	<ul style="list-style-type: none"> ❖ M.Tech Student Projects: 11 ❖ B.Tech Student Projects: 09

<p>List of Additional Responsibility Handled:</p>	<ol style="list-style-type: none"> 1. M.Tech Project Co-ordinator 2. Departmental Research Activities 3. Class Committee Chairperson 4. Mentor 5. Class in charge ship M.Tech (2016-2017), B.Tech (2013-2014) 6. NAAC Co-ordinator 7. NBA Criterion 5 In-charge
<p>Details of Programs (FDP/Workshop/Guest Lectures/IV) organized:</p>	<ul style="list-style-type: none"> • Organized Guest Lecture taken by Dr. Manjaiah D.H, Mangalore University and Dr. Varghese Paul on Current Trends in Computer Communication & Technology on March 2017 • Organized Guest Lecture taken by Dr. N. Krishnan on Research Methodology & How to prepare Research Paper: A guide to new Authors on October 2014
<p>Details of Seminars/ Conferences (National/International) Organized:</p>	<ul style="list-style-type: none"> • Served as organizing committee member in the 6th International Conference on “Innovations in Bio-Inspired Computing and Applications” on Dec 2015. • Served as the Team leader in the organizing committee for the 47th National and 16th International Conference of the Indian Academy of Applied Psychology June 2012.
<p>Other Academic Achievements (Any Awards/Involvement in R & D/Funds raised etc.):</p>	<ul style="list-style-type: none"> • Best Teacher Award for the year (2015- 2016) –CSE, Toc H Institute of Science and Technology • Developed Ladies Safety Mobile Application • Got NASSCOM award for the ‘Ladies Safety App’ • Secured 2nd position for the paper presentation (CS/IT) in the Techno Cultural Fest Brahma held on 2013

<p>Contribution to Institute Activity (Involvement any common organizing cell):</p>	<ul style="list-style-type: none"> • In-charge of the Lab Exam cell from 2010 to 2015. • Got access from KTU for accessing the PARAM Shavak, base end High Performance Computing facility in Toc H Institute of Science and Technology (TIST). • Served as part of organizing team of Collage Day • Served as part of organizing team of Graduation day of TIST • Served as part of organizing team of ARTS & SPORTS of TIST • Served as part of organizing team of First Year Inauguration of TIST. • Faculty representative in the editorial board of TIST Magazine.
<p>21. Contribution to Departmental Activity:</p>	<ul style="list-style-type: none"> • Conducting lectures and preparing the material for graduate and undergraduate students. • Preparing teaching material and utilizing it for the progress of students • Active in R & D activities in CSE department • Campus placement coordinator of CSE. • Served as faculty adviser of students. • Good Academic Results has been produced for every semester. • Guided UG projects for Computer Science and Engineering. • Constantly try to increase and improve students' growth, knowledge and skills through interpersonal engagement and counsel a group of 15 students with care to sustain and improve their performance. Meets the student at least three times in each semester, and discuss academic progress, attendance, other activities and achievements and details are noted in the mentor form.

Professional Membership	ACM (Professional Membership)
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EXPERIENCE : RESEARCH EXPERIENCE

Research Interest: Cryptography, Ethical Hacking and Digital Forensics, ANDROID.

- Research co-ordinator of Computer Science and Engineering Department in Toc H Institute of Science and Technology (TIST).
- Submitted 2 research proposal to national funding agency:
 - ‘A Novel and Robust Symmetric Block Cipher for Hand-held Devices’ DRDO, GOVERNMENT OF INDIA, NEW DELHI Rs: 7,00,000/- in July 2017.
 - ‘Secure & Error correcting data transmission scheme ensuring Data and Origin Integrity in Delay Tolerant Networks’, NAVAL RESEARCH BOARD, Under DRDO GOVERNMENT OF INDIA, NEW DELHI Rs: 10,00,000/- December 2016.
- **06** years of experience as Research Scholar (part time) in Anna University, Chennai, Tamil Nadu, India.(June 2011- till date).
- Developed an ANDROID application for ladies safety: ifollow and it became a great achievement in my research career.
- Got NASSCOM award for the ‘Ladies Safety App’.
- Successfully submitted the research proposal to get access from Kerala Technical University (KTU) for accessing the PARAM Shavak, base end High Performance Computing facility in TIST.

Course Work Completed:

1. Research Methodology
2. Ethical hacking And Digital Forensics
3. Applied Cryptography
4. Network Security (Subject Code CS: 9259)

Journal Publications:

Sl. No.	Title of the publication	Name of the journal	ISSN/ISBN No.	Year of publication
1	Dynamic Color Table: A novel S-box for Cryptographic applications	International Journal for communication System (Wiley SCI Indexed)	ISSN No:1099-1131; e33184	March, 2017
2	A Fast Color based Nonlinear 8 bit Pseudo-Random Number Generator Enabling Diffusion for Lightweight Cryptographic Applications	International Journal of Control Theory and Applications (Scopus Indexed)	vol. 8, no. 5, pp.1817-182.	2016
3	Wi-Fi Assisted Communication Network (WACN)- A novel and Independent solution for communication over challenged networks.	International Journal for Innovation and Scientific Research	ISSN No: 2351-8014	June 2016
4	Date Time Keyed – HMAC	IEEE Xplore Digital Library- IEEE Sponsored 3 rd International Conference on Innovations in Information, Embedded and Communication System (ICIIECS '16)	DOI: 10.1109/GET.2016.7916689	2016
5	A Novel and Robust Symmetric Block Cipher for Hand-Held Mobile Devices	IEEE Xplore Digital Library- IEEE Sponsored 3 rd International Conference on Innovations in Information, Embedded and Communication System (ICIIECS '16)	DOI: 10.1109/GET.2016.7916681	2016
6	BISC Authentication Algorithm: An Efficient New Authentication Algorithm using Three Factor Authentication for Mobile Banking	IEEE Xplore Digital Library- IEEE Sponsored 3 rd International Conference on Innovations in Information, Embedded and Communication System (ICIIECS '16)	DOI: 10.1109/GET.2016.7916852	2016

7	A Fast Color Authentication Algorithm for Secure Mobile Computing	International Journal of Applied Engineering Research (Scopus Indexed)	ISSN 0973-4562, vol.10, no 20, pp. 15900-15905.	March, 2015
8	Security and Privacy of Relational Data Using Access Control and Privacy Protection Mechanism.	ARNP Journal of Engineering and Applied Sciences	Vol. 10, No.9, ISSN: 1819-6608	May, 2015
9	Attack Identification in a Cryptographic System using Dynamic Taint Propagation	International Journal of Science and Engineering and Technology Research (IJSETR)	Vol. 4, No.4, ISSN: 2278-7798	April 2015
10	An encryption protocol for end-to-end secure transmission of SMS	IEEE Xplore- Circuit, Power and Computing Technologies (ICCPCT), 2015 International Conference on 19-20 March 2015	DOI: 10.1109/ICCPCT.2015.7159471	March 2015
11	DNA Based Cryptography Using Permutation and Random key Generation Method	International journal of Innovation Research in Science, Engineering and Technology	Volume 3, Issue: 5 ISSN(Online): 2319-8753	July, 2014
12	A new cryptographic Algorithm Based on UNICODE and RGB color model	International Journal of Research in Engineering and Technology	Vol.3, pISSN: 2321-7308 eISSN: 2319-1163	March, 2014.
13	A novel Approach for Medical image Security in PACS	International Journal of Emerging Trends in Engineering and Development.	Volume 2, Issue: 4 ISSN 2249-6149	March, 2014
14	An Efficient Approach for Security by SDS Algorithm	International Journal of Emerging Trends in Engineering and Development	Volume 2, Issue: 4 ISSN 2249-6149	March, 2014
15	A Multilevel Security Scheme based on UNICODE and RGB Color Model using DNA Cryptography.	International Journal Of Computer And Applications	Vol.8	2013

Conference Paper Presentation And Participation:

- Presented paper on ‘An Efficient Dynamic Cryptographic Algorithm to Ensure Confidentiality of Medical Data in Biomedical Applications’ IEEE Sponsored **International Conference** on Innovations in information Embedded and Communication Systems (ICIIECS) ISBN: 978-1-5090-3293-8, Karpagam College of Engineering, March 2017.
- Presented paper on ‘A Fast Color based Nonlinear 8 bit Pseudo-Random Number Generator Enabling Diffusion for Lightweight Cryptographic Applications’ in the Springer **International Conference** on Soft Computing Systems organized by the department of Electrical and Electronics Engineering, Noorul Islam University held on 19th February 2016.
- Presented paper on ‘A Fast Color Authentication Algorithm for Secure Mobile Computing’, in DRDO sponsored 2nd IEEE **International Conference** on Innovations in Information, Embedded and Communication Systems on March 2015 organised by the department of Electronics and Communication Engineering, Karpagam College of Engineering Coimbatore, India.
- Participated in the 6th International Conference on ‘ Innovations in Bio-Inspired Computing and Applications’, organised by Toc H Institute of Science and Technology, December 2015.
- Presented paper on ‘ DNA based Cryptography using permutation and random key generation method’ in International Conference on Innovations, Advances in Science, Engineering and Technology organised by Toc H Institute of Science and Technology, July 2014.
- Presented paper on ‘A Multiphase Encryption Technique based on Principles of DNA Computing using Matrices and RGB Universal Colors’ in Elsevier International Conference on Advances in Computing, Communication and Information Sciences, June 2014.
- Presented paper on ‘A new cryptographic Algorithm Based on UNICODE and RGB colour model’, at **National Conference on “Wireless Communication, Mobile Computing, & Emerging Technologies (WICOMET)”** held in March 2014 at TIST.

- Presented paper on ‘A Near Optimal Social Network Defence Using Sybillimit and to Enhance Remote Attestation in Peer to Peer Networks’ **National Conference** on Advanced in Computing and Information Security, July 2013.
- Research paper on ‘A Secured RSA Based on Central Dogma of DNA with Robust Hiding using Insertion Technique’ presented at **National Conference** on Emerging Trends in Computer Science and Applications, held in February 2013.
- Research paper on ‘A multilevel security scheme based on UNICODE and RGB colour model using cryptography’ presented at **International Conference** on Emerging Technologies (ICETT), February 2012, held at Quilon beach hotel.
- Research paper on “Principles Of Central Dogma Of Molecular Biology in Cryptography using Colours” presented at **International Seminar** on “Wireless Communication, Mobile Computing, & Emerging Technologies(WICOMET)” held in September 2011 at TIST.
- Presented “Double layer data protection using DNA cryptography” in **National Conference** on Computing Technologies(NCCT) held at SNGCE, Kolenchery in March 2012.
- Presented a paper “Applied Psychology and human resource management in various organizations” and participated in 47th **National & 16th International Conference** of Indian Academy of Applied Psychology(IAAP) held in June 2012 at TIST.
- Participated on International Seminar conducted by Adi Sankara Institute Of Engineering And Technology, Kalady held in June 2011.

OTHER PROFESSIONAL ACTIVITIES

Workshops/Seminars/Conference/QIPs/FDPs Attended:

Sl. No.	Internal/ External	Area in which FDP/Workshop/Training Attended	No. of Days	Year of Event

1	External	Workshop on Women in CyberSecurity Research (WCR'18)	2	May 2018
2	External	Security and Forensics in Cyber Space: Advances and Future Directions	3	December 2017
3	Internal	Advanced Web Technologies	5	June 2017
4	Internal	Moodle	5	June 2017
5	Internal	Free & Open Source Software	3	Dec2016
6	External	IT tools for Academic and Research (R Programming)	3	Dec 2016
7	Internal	Secure Cloud Computing	5	June 2016
8	External	Cloud Computing and its Applications in Engineering	3	Feb 2016
9	Internal	Advanced Trends in Computing and Programming	6	June 2015
10	External	Workshop on WIKIMEDIA	3	Sep 2014
11	Internal	Software Testing	2	June 2013
12	External	Business English	4	May 2013
13	External	Mobile Application Development using Android	3	Feb 2013
14	Internal	Ethical hacking & Cyber Security	2	Feb 2013
15	External	Ethical Hacking and Cyber Forensics	2	Jan 2013
16	Internal	Instructional Design & Delivery System	3	May 2012
17	External	Regional Telecom Training: FDP	6	June 2011

Other Achievements(Academics/Extra Curricular):

- Presented my research finding “Dynamic Colour Table” in “Workshop on Women in Cyber Security Research (WCR’18)”.
- Successfully completed Infosys Campus Connect Program “**Train The Trainer Workshop On Mobile Application Development Using Android**”.
- Completed C#.net training in 2007.
- Gate Score 92% in the year 2007.
- Got **Second prize in Kerala Sate Level** and got so many price in national level, district level Oil Painting competition.
- **Arts Club Secretary** of Muslim Association College of Engineering, year 2003-’04.
- Won prizes at District level for poetry writing and essay writing in year 2002.
- Secured 3rd rank in Legal literacy Quiz contest in the year 2000-’01.
- Got 1st rank in “**Thaliru**” scholarship exams in 2000-’01 conducted by “Kerala State Library Council”.

Professional Training/ Short term Course Attended:

- Professional Certification on Information Security for the successful completion in “Ethical hacking and Cyber Forensics” on January 2013.
- Successfully completed Diploma course in Applied Psychology (1 year) by NITTR, Chennai.
- Successfully completed 1 week in –service training (16-06-2011 to 22-06-2011) on Faculty development programme conducted by Regional Telecom Training Center, Thiruvananthapuram, Kerala.
- Undergone Industrial Training in C-DIT from 31-08-2005 to 3-09-2005 and become familiar with software development, E-Governance etc.

Technical Skills:

- Programming skills: C, C++, Java , ANDROID
- Database: MSSQL, MySQL, Sqlite
- Operating System: Windows 95 and above, Linux
- IDE: Visual Studio, Net Beans, Eclipse

Professional Skills:

- Ability to research and review new teaching material and technologies with focus on quantitative and qualitative elements.
- Able to plan research and organise tasks effectively.

- Ability to resolve problems independently.
- Possessing a creative approach to problem solving.
- Excellent interpersonal and teaching skills
- Ability to understand diverse learning needs of students
- Possess good monitoring and management skills.
- Excellent coordinating skills with faculty, administration and students.

PERSONAL INFORMATION

Father's Name : S.Vijayan.
Mother's Name : P.S Hanza.
Husband's Name : Sudhin Vamattam.
Kids Name : Dhyan Vamattam, Ema Vamattam
Sex : Female
Date of Birth : 13-09-1985
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REFERENCE

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Phone : 0484-2738125

Place: Ernakulam,
Date: 06-06-2018.

Panchami.V