

### Dr Ramesh S

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## Expertise

### **Electrical and Electronic Engineering**

Cryptography; Digital Communication; Wireless communication

## Work experience

1. Dr Ambedkar Institute of Technology, Bengaluru 1992 — Present

Professor Bengaluru

## Education

1. Ph.D - 2013

Dr.MGR Educational and Research Institute

2. M TECH - 2001

Sri Jayachamarajendra College of Engineering, Mysuru

3. B.E ECE - 1990

## Honours and Awards

1. Best academician award - 2020

IJIEMR -Elsevier SSRN Research Awards

## Research Project

### **Robotics and Automation**

Role: Chief Coordinator Year 2022, Amount 35000

### Humanoid Front Desk Robot

Role: Guide

Year 2021, Amount 6000

## 5G Wireless Technology

Role: Chief Coordinator Year 2021, Amount 20000

### Chaos Based Audio Encryption scheme

Role: Principal Investigator Year 2018, Amount 20lakhs

## Membership In Professional Bodies

- 1. **IEEE**, 2022 Year
- 2. CRSI, 2009 Life
- 3. **ISTE,** 1994 Life

## Membership In Committees

1. Dr. AIT, 2022 Program Evaluation Committee

2. Academic Council member Nagarjuna college of engineering and Technology , Bengaluru , 2020

VTU nominee

- 3. Dr. Ambedkar Institute of Technology, Bengaluru, 2019 academic council member
- 4. Dr AIT, 2019
  Board of studies
- 5. **Dr AIT,** 2019 Chairman BOE
- TEQIP 3 , 2017 NODAL OFFICER FINANCE, Dr. AIT, BENGALURU
- 7. 1st International Conference on Power, Circuit and Information Technologies, 2015
  PROGRAM COMMITTEE MEMBER

### **Patent**

 Generation of Random Binary Sequence using Chaotic Function with Novel Permutation and Substitution Techniques for Cryptographic Applications

Inventor(s): Ramesh s , Pushpalatha G S, Assignee:

Published: 0000-00-00

2. DWT Based Feature Extraction for Iris Recognition

Inventor(s): Harsha R, Meenakshi L Rathod, Shivaputra, Shwetha M, Chetan S, Ramesh A and Mahalinga

V Mandi, Assignee: Published: 2021-01-06

3. Methods for generating Highly Random Sequences over Finite Fields for

### FHSS (Frequency Hopping Spread Spectrum) Systems

Inventor(s): Dr. Mahalinga V. Mandi, Dr. K.N. Hari Bhat, Dr. Ramesh S, Assignee:

Published: 2018-12-21

### **Publication**

 Randomness properties of sequence generated using logistic map with novel permutation and substitution techniques

Pushpalatha G S,Ramesh S International journal of electrical and computer engineering , Volume 13, Year 2023, Pages 4

2. Pseudo Random Binary Sequences Obtained Using Novel Chaos Based Key Stream Generator and their Auto-correlation Properties

Pushpalatha G S,Ramesh S International Journal on Recent and Innovation Trends in Computing and Communication, Volume 11, Year 2023, Pages 05

3. Regression test automation for the security and geo-resiliency of airscale radio network controller in umts/w-cdma mobile networks

Vani K and Ramesh S Design Engineering, Volume 9, Year 2021, Pages 10500-10508

 Design and ASIC Implementation of Efficient 8-bit Integer Division Algorithms

Anusha R Naganur and Ramesh S Annals, Volume 25, Year 2021, Pages 12463-12474

5. Efficient Temporal-key Based Encryption Mechanism for WSN-ETEM

Premakumar M N and Ramesh S IJITEE, Volume 9, Year 2020, Pages 143-148

6. A Novel Security Scheme of Temporal-Key Based Encryption Policy in Sensor Applications

Premakumar M.N.;Ramesh S.

Lecture Notes on Data Engineering and Communications Technologies, Volume 44, Year 2020, Pages 152-161

7. Generation of binary sequences of length 10230 bits having better odd and even correlation with large linear complexity for use in global navigation satellites systems (GNSS) applications

Dharmappa D.;Mandi M.V.;Siddaiah R. Mathematical Modelling of Engineering Problems, Volume 7, Year 2020, Pages 94-102

8. An Efficient Implementation of MIL\_STD\_1553B Bus Controller Module Using Verilog HDL

Bharathi S and Ramesh S MAT Journals, Volume 4, Year 2019, Pages 25-35

### 9. Voice Encryption with Watermarking for Secure Speech Communication

Pushpalatha G S

International Journal for Research in Applied Science & Engineering Technology, Volume , Year 2019, Pages

# 10. Binary sequences having good correlation and large linear complexity properties for satellite navigation applications

Dharmappa D.; Mandi M.; Ramesh S.

International Journal of Recent Technology and Engineering, Volume 7, Year 2019, Pages 61-67

### 11. IoT based Automated Polyhouse Monitoring and Control System

V Chaithra, C Harshitha, KT Shwetha, UR Sowmyashri, S Ramesh IJRESM, Volume 1, Year 2018, Pages 9-11

# 12. Analysis of binary sequences with better correlation performance compared to gold code under different doppler conditions for GNSS applications

Dharmappa D.; Mandi M.V.; Ramesh S.

2018 3rd IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology, RTEICT 2018 - Proceedings, Volume , Year 2018, Pages 209-215

### 13. Generation of Binary Sequences Having Better Odd Correlation and Linear Complexity Property Compared to Gold Codes for use in Global Navigation Satellites Systems (GNSS) Applications

Dharmappa D.; Mandi M.V.; Ramesh S.

International Conference on Current Trends in Computer, Electrical, Electronics and Communication, CTCEEC 2017, Volume , Year 2018, Pages 155-160

# 14. Hard Real Time Task Execution On Virtual Hardware Using EDF Scheduling Policy

Shanmukha and Ramesh S

International Journal of Engineering Science and Computing, Volume, Year 2016, Pages 325-328

# 15. A survey on binary sequence generation methods for global navigation satellite systems (GNSS)

Dharmappa D.; Mandi M.V.; Ramesh S.

Far East Journal of Electronics and Communications, Volume 16, Year 2016, Pages 775-788

### 16. Simulation of OFDM Signals for Audio Signal

Chetan S and Murali R Mahalinga V. Mandi, Ramesh S, Shivaputra International Research Journal Engineering Technology(IRJET), Volume 2, Year 2015, Pages

### 17. Optimized high performance multiplier using Vedic Mathematics

Dr. Ramesh s Pradeep M C

IOSR Journal of VLSI and Signal Processing (IOSR-JVSP), Volume 4, Year 2014, Pages

### 18. Implementation of high performance binary squarer

Dr. Ramesh Pradeep M C International Journal of VLSI and Embedded Systems-IJVES, Volume 5, Year 2014, Pages

# 19. Study on Linear Complexity of Sequences Generated Using Modified A5/1 Algorithm

Ramesh S and Anil Kumar International Journal of Science and Research (IJSR), Volume, Year 2013, Pages

# 20. Correlation and randomness properties of binary sequences generated using matrix reccurence relation defined over Z8

Ramesh S.; Dileep D.

CHAOS 2013 - 6th Chaotic Modeling and Simulation International Conference, Proceedings, Volume , Year 2013, Pages 533-546

### 21. Net list level IP protection by watermarking for LUT based FPGA's

Mahalinga V Mandi, Ramesh S and Sumathi V. K International Journal of Computer Applications & Information Technology, Volume 1, Year 2012, Pages 10 - 16

## 22. On Linear Complexity of Binary Sequences Generated Using Matrix Recurrence Relation Defined Over Z4

ramesh S Haribhat K N R Murali International Journal of Distributed and Parallel Systems (IJDPS) Vol.1, No.2, November 2010, Volume 1, Year 2010, Pages

# 23. An FPGA Implementation of a Pseudo-Chaotic Direct Sequence Spread Spectrum (DS-SS) Communication System

Mahalinga V. Mandi, Ramesh S, Santosh Kulal, Santosh Kumar S, Dileep D, Yajnesh Padiyar International Journal of Non-Linear Science (IJNS), Volume 8, Year 2009, Pages 387-401

### 24. FPGA implementation of vedic signed multiplier

Yajnesh Padiyar, Mahalinga V Mandi, S Ramesh, D Dileep MATHEMATICAL SCIENCES, Volume 126, Year 2009, Pages

# 25. Generation of Sequence of Random Numbers defined over z4 and their correlation properties

ramesh s haribhat K N R murali Print ISBN: 1-4244-0800-8, Volume , Year 2006, Pages

# 26. Generation of sequence of random numbers defined over Z4 and their correlation properties

Ramesh S.;Murali R.;Haribhat K.N. International Conference on Communication Technology Proceedings, ICCT, Volume , Year 2006

### 27. Water Marked Image Encryption Using Logistic Map

Mahalinga V. Mandi, Ramesh S, Shivaputra, Dileep D International Journal of Computer Network and Security (IJCNS), Volume 2, Pages 91-95 Downloaded from <u>Vidwan</u> : Expert Database & National Researcher's Network

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