

Dr. RAKESH NAYAK

Professor

Department: Computer Science & Engineering**Faculty ID:** VEC502**Designation:** PROFESSOR**Years of Experience:** 19 years**Employment Status:** Full Time - Ratified by JNTUH**Email:** nayakrakesh8@gmail.com**Faculty Web/Blog:** StudiesStudio.com**LinkedIn Profile:** www.linkedin.com/profile**DOJ:** 06 Feb , 2017**Phone:** +91-9440530306**Date of Birth:** 07 April , 1973**Areas of Specialization:** Cryptography, Network Security, Big Data, Data Mining**Qualifications:**

Degree	College/University	Year
Ph.D. in CSE	Behrampur University	2013
PG Degree in CSE	Acharya Nagarjuna University	2010
UG Degree in MCA	IGNOU	2007
M.Phil in Mathematics	Sambalpur Univenessity	1997
PG Degree in Mathematics	Sambalpur Univenessity	1996

Subjects Taught:

Design and Analysis of Algorithm, Data Structures, Formal Language and Automata Theory, Compiler Design, Object Oriented Analysis and Design, Database Management System, Discrete Mathematics, Data Mining.

Papers Published:**Conference:**

1. Rakesh Nayak, C.V.Sastry, Jayaram Pradhan, “**A matrix formulation for NTRU cryptosystem**” Proceedings 16th IEEE, International Conference on Networks (ICON-2008), New Delhi from 12th-14th Dec’08

2. Rakesh Nayak, C.V.Sastry, Jayaram Pradhan, "**NTRU Cryptosystem for block Cipher**" Proceedings National Conference on Emerging Trends in Data Mining, ware housing and Computer Communication, SNIST, Hyderabad from 29th-30th June 2009
3. G. Srinivasa Rao, Md Mir Khasim, Rakesh Nayak, "**Algorithm To Generate Multiple Key In NTRU Cryptosystem**", International Conference on Advances in Mathematical and Computational Methods (AMCM 2011) Sri Padmavati Mahila Visvavidyalayam, Tirupati from 5th-7th Jan 2011
4. Rakesh Nayak, C.V.Sastry, Jayaram Pradhan, "**Reaction attacks in the Matrix Scheme of NTRU Cryptosystem**", International Conference (AIM-2011), Nagpur, From 21st -22nd Apr 2011
5. Rakesh Nayak, C.V.Sastry, Jayaram Pradhan, "**Evaluation of Performance Characteristics of Polynomial based and lattice Based NTRU Cryptosystem**", Proc. of International Conference on Advances in Computer Science 2011, Noida, India. From 20th-21st Dec 2011.
6. Rakesh Nayak, Sudam Sekhar Panda, M. Veeranjanyulu, D. Srinivas **A Mathematical Model for Perishable Resource Management**, Proc. of International Conference on Contemporary Approaches In Mathematics And Emerging Engineering Trends, Arupadai Veedu Institute of Technology, Tamil Nadu. 4th-5th May 2017
7. M.Ravi Sankar, Rakesh Nayak, Sudam Sekhar Panda, **Web of Things: an outline**, Proc. of International Conference on Innovations & Discoveries in Science, Engineering and Management, Vaageswari College of Engineering, Karimnagar 9th-10th April 2018

Journals:

1. "**An algorithmic Comparison between polynomial base and Matrix based NTRU cryptosystem**", International Journal of Computer and Network Security (IJCNS) Vol.2, No.7, July 2010. (ISSN Print: 2076-2739, ISSN Online: 2076-9199).
2. "**NTRU Digital Signature Scheme - A Matrix Approach**", International Journal of Advanced Research in Computer Science (IJARCS) Volume II issue I, Feb. 2011. (ISSN 0976 - 5697)
3. "**Dependent Private Key Generation in NTRU Cryptosystems**", International Journal of Computer Applications (IJCA) Special Issue on "Network Security and Cryptography" NSC, 2011. (ISBN: 978-93-80865-68-5).
4. "**Analysis and Performance Characteristics of Cryptosystem using Image Files**", International Journal of Computer Applications (IJCA) Volume 51– No.22, August 2012 (0975 –8887).
5. "**Dual Encryption Schema With Cheating Text and NTRU**" International Journal of Computer Trends and Technology (IJCTT)- volume 4 Issue 2- 2013, ISSN: 2231-2803, pp: 169-171.
6. "**An NTRU Scheme for Secure Transaction in Grid Implementation**", International Journal of Emerging Technology and Advanced Engineering (IJETA), ISSN 2250-2459, Volume 3, Issue 2, February, 2013 pp: 648-652

7. **"Secure Mobile System Using NTRU Encrypt"**, International Journal of Computer Trends and Technology(IJCTT)- volume4 Issue2- 2013,ISSN: 2231-2803,pp:172-176.
8. **"Spectral Flatness Measurements for Detection of C-Worms"**, International Journal of Computer Trends and Technology(IJCTT)- volume4 Issue2- 2013,ISSN: 2231-2803,pp: 189-193.
9. **"Performance and analysis of NTRU and Advanced NTRU cryptosystems"**, International Journal of Research in Computer and Communication Technology, Vol 2 Issue 8, August -2013, ISSN(Online) 2278-5841, ISSN (Print) 2320-5156, PP 627-632.
10. **"Avalanche Effect and Statistical Analysis of NTRU & RSA Cryptosystem"**, International Journal of Advanced Research in Computer Science and Software Engineering(IJARCS&SE) Vol 3, Issue 8, August 2013, ISSN: 2277 128X, PP 416-422.
11. **"Integrated Data Mining Approach for Security Alert System"** International Journal of Research in Computer and Communication Technology (IJRCCT) Vol 3 No 4, April 2014, PP 464-468 (ISSN Online:2278-5841 ISSN Print:2320-5156).
12. **"Predictive Collective Behavior in Social Media Network Using Edge Centric Clustering"**, International Journal of Research in Computer and Communication Technology(IJRCCT), Vol 3, Issue 10, October – 2014,pp 1225-1230.
13. **"An Obfuscation threshold as part of the Access policy in processing systems"**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 3, Issue 11, Nov – 2014,pp: 1653-1660.
14. **"Decentralized Probabilistic Text Clustering by using Distributed Hierarchical peer to peer Clustering"**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 3, Issue 11, Nov – 2014,pp 1661- 1665.
15. **"Analysis of Rabin and RSA Cryptosystems Using Bit Shifting and Stuffing (BSS) Technique"**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 4, Issue 2 ,February -2015,pp 119- 124.
16. **"NTRU with Gaussian Integer Matrix"**, International Journal of Advanced Research in Computer Science and Software Engineering(IJARCSSE), Vol 5, Issue 2, February 2015, pp 359-365.
17. **"Multiple Private Keys with NTRU Cryptosystem"**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 4, Issue 3 , March -2015. Pp 250–255.
18. **"Analysis of Rabin and RSA Cryptosystems Using Bit Shifting and Stuffing (BSS) Technique"**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 4, Issue 2 ,February -2015, pp: 119- 124

19. **“A new approach on Rabin based Cryptosystem for specifying correct plain text”**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 4, Issue 5 , May - 2015,pp 354-357
20. **“Steganography with BSS-RSA-LSB technique: A new approach to Steganography”**, International Journal of Science Engineering and Advance Technology (IJSEAT) Vol. 3 Issue 5, May, 2015 pp 187-192.
21. **“The Safety Framework in Network Security utilizing Cryptographic Systems”**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 5, Issue 1, January- 2016,pp 07-13, (ISSN Online:2278-5841 ISSN Print:2320-5156).
22. **“Block cipher in NTRU”**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 5, Issue 1, January- 2016,pp 14-17, (ISSN Online:2278-5841 ISSN Print:2320-5156).
23. **“Internet of things (IoT), Gives life to Non living”**, International Journal of Research in Computer and Communication Technology (IJRCCT), Vol 5, Issue 2, February- 2016,pp 43-46, (ISSN Online:2278-5841 ISSN Print:2320-5156).
24. **“Secure Data Retrieval for Confidential Information by External Storage Nodes in Disruption Tolerant Military Networks”**, International Journal of Scientific Engineering and Technology Research (IJSETR)Volume.05, IssueNo.11, May-2016, pp: 2280-2284 (ISSN 2319-8885)
25. **“Dynamic User Identity Verification for Secure and Transparent Using Internet Services”** , International Journal for Research on Electronics and Computer Science (IJRECS) , V-10, I-5, Jan 2017, pp: 6279- 6283 ISSN-2321-5784 (Print) ISSN-2321-5485(Online)

Awards:

“Silver level Partner” with Infosys Campus Connect, 2013.

Roles and responsibilities:

- I have served as **Enforcement Officer** for AP EAMCET-2016.
- I have served in the capacity of Head of The Department in the Department of MCA at National Institute of Computer Sciences and at Regency institute of Technology, Yanam.
- I have served in the capacity of Coordinator M.Tech (CSE) at Sri Vasavi Engineering College, Tadepalligudem.

Books Published:

1. A book on “Data Structures and Algorithms” with ISBN 97893 85909849 published by by IK International, Delhi.
2. A book on “Discrete Mathematics” with ISBN 97893 86768698 published by by IK International, Delhi.

Videos:

I have created e-content in the form of videos on computer science subjects in English as well as in Hindi. In total more than 300 videos are available are on subjects like:

1. Design and Analysis of Algorithms (53 + 53)
2. Data Structures (38 + 38)
3. Formal Language and Automata Theory (68 + 68)

Membership of Technical Society :

- India Society for Technical Education (ISTE): LM83382
- International Association of Engineers (IAENG) membership number is: 100428
- Senior member of the International Association of Computer Science and Information Technology (IACSIT) Membership Number : 80349494
- Associate Member of Institute of Engineers :AM1561432
- Computer Society of India (CSI): 11503240