



BIODATA

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Origin: India

Nationality: Indian

Date of birth: May' 08, 1983

Marital status: Married

Personal skills :

Good verbal and written communication skills, Ability to deal with people diplomatically, willingness to learn, equally comfortable in working as an individual as well as in a team.

Academic experiences :

Sl No	Name of Organization	Type of Job	Post	Date of Joining	Date of Leaving	Total Experiences	Reason for leaving
1.	National Institute of Technology, Arunachal Pradesh	Full Time	Asst. Professor	01.12.2011	Continuing	8.9 Years	-
2.	Bengal Institute of Technology & Management, Santiniketan	Full Time	Asst. Professor	21.09.2008	25.11.2012	4.1 Years	Joined as an Asst. Professor NIT, Arunachal Pradesh
3.	Jalpaiguri Govt. Engineering College	Part - Time	Lecturer	26.02.2006	30.06.2007	1.4 Years	Higher Study (M.E.)

Administrative experiences :

Duration	Designation	Duties	Experience in Years
2012 - till date	Network Administrator	Maintaining the Servers (Web Servers, Mail Server, DNS server, DHCP server etc.), firewall of NIT Arunachal Pradesh.	Continuing
2012 - 2013	Web Master	Developed & maintained web site of NIT Arunachal Pradesh	01 year
2012 - 14 th February' 2018	CVO	Vigilance activities of NIT Arunachal Pradesh	06 years
2012 - 2016	CPIO	RTI activities & public relationship	04 years

2012 - till date	Nodal Officer (Visvesvaraya Ph.D. Scheme, NIRF Portal)	Coordination	Continuing
2012 - 14 th February' 2018	RTI online, Public Grievances, NIFM and AISHE)	Coordinator of all e-governance portal related to NIT Arunachal Pradesh	06 Years
2013 - till date	System Administrator	Implementation of e-governance. Coordinator of all video conferencing meeting/ activities.	Continuing
2012 - till date	Deputy In-Charge/ Faculty coordinator CCB-12, CSAB13, CSAB-14, CSAB-15, CSAB-16, CSAB-17, CSAB-18	Counseling process Through AIEEE 12, JEE(Main)-13-17	Continuing
August' 2017 - 14 th February' 2018	Dean (Academic & Examinations)	Looking after all activities of examination cell	06 months

Achievements :

Received International Travel Support grant from DST, Govt. of India to present my research paper on 2nd International Conference on Advances in computer Science & Engineering, CSE2013, Organized by

Awards details :

- [1.] Awarded as one of the best teacher of NIT Arunachal Pradesh for the academic year of 2011-2012.
- [2.] Awarded as one of the best teacher of Bengal Institute of Technology & Management, Bolpur, West Bengal for the academic year of 2010-2011. CSE-2013 committee from 1st – 2nd July' 2013 at Los Angeles, USA.

Educational Qualifications :

- [1.] **Ph. D** in Computer Science & Engineering in 2015 from NIT, Arunachal Pradesh.
- [2.] **M.E.** in **Multimedia Development** in 2009 from **Jadavpur University with CGPA of 7.72**
- [3.] **B.Tech** in **Information Technology** in 2005 from **Siliguri Institute of Technology with DGPA of 7.15.**

Professional skills :

- [1.] **Operating System:** Windows, Windows Server, LINUX
- [2.] **Programming Languages:** C, JAVA, C++, Oracle, VB6, JSP, SERVLET, ASP .NET
- [3.] **Networking Technologies:** ISO/OSI Reference Model
- [4.] **Multimedia Tools:** Adobe Flash CS5 , Adobe Photoshop CS5, Macromedia Director, Macromedia Dreamweaver CS5, Sound Forge
- [5.] **Developed and maintained the Website of BITM, Santiniketan by using ASP.NET**
- [6.] **Developed the Website of NIT, Arunachal Pradesh by using ASP.NET**
- [7.] Configured, Developed & maintaining the Campus Network of NIT Arunachal Pradesh.

Subjects Taught :

- Computer Graphics and Multimedia Theory
- Databased Management System
- Formal Language & Automata Theory
- Object Oriented Programming
- Visual Programming & Web Technology
- Multimedia Technology
- Internet Technology

Training Program details :

- Attended special training on Oracle 8i by ORG Informatics.
- Completed special training on Multimedia Technology by C-DAC.

Projects done in M.E. & B.Tech respectively:

M.E.

- **Design & Development of a tracking application using LBS**
Description: This application based on mobile location tracking using Sun Java Wireless Tool which will find out location of mobile device.
Operating System Used: Windows XP
Programming Languages Used: J2ME

- **Design & Development of a Computer based training application for kindergarten students**

Description:

Operating System Used: Windows XP

Programming Languages Used: Action Script,

Software Used: Macromedia Flash 5, Macromedia Director 5, Adobe Photoshop 6

B.Tech

- **Computerized Payroll generation System**

Description: This software package automates the process of Pay sheet generation, creation of reports and satisfies the query optimization techniques.

Operating System Used: Win2000Server

Software Used: VB6, Oracle8i.

Programming Languages Used: VB Script, SQL

Projects undertaken/proposed::

Name of the project:	Study & analysis on new technique “Key Variation with Noise Burst Bit (KVNBB) in Automatic Variable Key (AVK) in Cryptography.
Project Sanctioning Authority:	Dept. of Computer Science & Engineering, NIT Arunachal Pradesh
Project Duration:	1 Year

Professional membership details:

- Life member of Cryptology Research Society of India: CRSI
- Life member of Indian Science Congress Association.
- Member of IEEE computer society.

List of publications:

Journals:

- [1]. R S. Goswami, et. al, “*Generation of Automatic Variable Key under various approaches in Cryptography System*”, Journal of the Institution of Engineers (India): Series B (Springer), Volume 94, Issue 4, pp 215-220, DOI: 10.1007/s40031-013-0066-8, December’ 2013 – February’2014.
- [2]. R S. Goswami, et. al, “*Approach towards Optimum Data Transfer with Various Automatic Variable Key (AVK) Techniques to Achieve Perfect Security with Analysis and Comparison*”, International Journal of Computer Applications (0975 – 8887), Volume 82-No. 1, pp- 28-

32, November 2013.

- [3]. R S. Goswami, et. al, “*Cypher Combining Technique to Tackle Error Propagation Behavior of AES*”, International journal of Current Science & Technology, pp -159-160, March, 2013.
- [4]. Rajat S Goswami et. al, “Three new Investigations of Aggressive Packet Combining to get high throughput” , International Journal of Computer Applications, USA, (0975-8887), Volume 81-No. 5, November, 2013, pp- 41-44,.
- [5]. Rajat S Goswami et. al, “Investigation of new Scheme of Aggressive Packet Combining” , International Journal of Current Science & Technology. ISSN NO: 23205636, Vol.-1, No.-2, (2013), pp- 223-225.
- [6]. R S. Goswami et. al “*New Techniques for generating of Automatic Variable Key in Achieving Perfect Security*”, Journal of the Institution of Engineers (India): Series B (Springer), Volume 95, Issue 3, pp 197-201, DOI 10.1007/s40031-014-0103-2, July – September’ 2014.
- [7]. Rajat S Goswami et. al, “Two New Protocols for Improving Performance of Aggressive Packet Combining Scheme” , International Journal of Current Science & Technology. ISSN NO: 23205636, Vol.-1, No.-1 (2014), pp- 161-165.
- [8]. Rajat S Goswami et. al “Investigation of Two New Protocols of Aggressive Packet combining scheme in achieving better throughput”, Journal of The Institution of Engineers (India): Series B , Springer ,96 (2) (2015), 141-145, DOI: 10.1007/ s40031 -014-0135-7.
- [9]. Rajat S Goswami et. al, “Studies of several new modifications of Aggressive Packet Combining to achieve higher throughput, based on correction capability of disjoint error vectors”, Journal of The Institution of Engineers (India), Springer: Series B 97 (2) (2016), 269-272 , DOI: 10.1007/s40031-014-0162-4.
- [10]. R S. Goswami et. Al, “*A Study to Examine the Superiority of CSAVK, AVK over Conventional Encryption with a Single Key*”, International Journal of Security and Its Applications (SCOPUS) Vol. 10, No. 2 (2016), pp.279-286.
- [11]. R S. Goswami et. al, “*Implementation of New Method to Generate a Key in Automatic Variable Key for Perfect Security*”, International Journal of Security and Its Applications (SCOPUS) Vol. 10, No. 4 (2016), pp.367-376.
- [12]. Rajat Subhra Goswami et. al, “Hybrid Protocol for Molecular Communication in Three States Markov Model”, JOURNAL OF ENGINEERING TECHNOLOGY 6 (1) (2017), 113-123

- [13]. RS Goswami et. al, "Technique to Generate Variable Keys with Key Variation with Noise Burst Bit for Achieving Perfect Security in Cryptology towards Optimum Data Transfer, International Journal of Security and Its Applications 11 (3)(2017), 39-50(SCOPUS)
- [14]. RS Goswami et. al, "An approach to generate variable keys based on vertical horizontal mechanism, International Journal of Security and Its Applications 11 (3) (2017), 61-70 (SCOPUS)
- [15]. R S. Goswami et. al, "Investigation a new technique of AVK using two dimensional matrix approach to achieve perfect security with analysis and comparison with other techniques of AVK", International Journal of Communication Networks and Distributed Systems, Vol. 20, No. 2 (2018), pp.214-225 (SCOPUS) (INDERSCIENCE JOURNAL)
- [16]. Rajat Subhra Goswami et. al, Swarnendu Kumar Chakraborty, Chandan Tilak Bhunia, "Key Variation Technique based on Piggybacking Strategies under Public Key Environments", Journal of Discrete Mathematical Sciences and Cryptography 21 (1) (2018), 59-73 (SCOPUS)
- [17]. RS Goswami et. al, "An Enhanced and Secure Biometric Based User Authentication Scheme in Wireless Sensor Networks Using Smart Cards ,Wireless Personal Communications, 1-28 (2019) (SCI)

Conferences:

- [1]. RS Goswami et. al, "A New Technique (CSAVK) of Automatic Variable Key in Achieving Perfect Security", 100th Indian Science Congress Association, January 2013.
- [2]. RS Goswami et. al, A. Bhunia, C. T. Bhunia, "New approach towards generation of Automatic Variable Key to achieve Perfect Security", 10th International Conference on Internet Technology, Next Generation, ITNG, IEEE computer Society, CPS, pp: 489-491, 14th – 17th April' 2013.
- [3]. RS Goswami et. al, "Various New Methods of Implementing AVK", 2nd International Conference on Advances in computer Science & Engineering, CSE2013, Atlantis Press, pp: 149-152, 1st – 2nd July' 2013.
- [4]. RS Goswami et. al, "Review and suggestions of Time variant Key (Automatic Variable Key) Techniques", National Conference on Emerging Trends in Computing (NCETIC), India, pp-12-15, 13th -15th June' 2013, Thrissur, Kerala.
- [5]. RS Goswami et. al, "Two new modified schemes of Aggressive Packet Combining Schemes in Achieving Better Throughput" , IEEE, ITNG, pp-729-730 IEEE Computer Society, CPS, Las Vegas, 2013

- [6]. RS Goswami et. al, “*Schemes of High Throughput Modified Aggressive Packet Combining*” , Proceedings 100th Indian Science Congress, pp-159, 2013.
- [7]. RS Goswami et. al, “*Method of Non Majority Decision Making In Aggressive Packet Combining Scheme*” , IEEE, ITNG, IEEE Computer Society, CPS, Las Vegas, 2014.
- [8]. RS Goswami et. al, “*New Protocol of Aggressive Packet Combining in Gilbert Two State Model*” , IEEE, CIEC, University of Calcutta , 2014.
- [9]. RS Goswami et. al, “*Aggressive Packet Combining Schemes: Review*”, National Conference on Emerging Trends in Computing, NCETIC- 2013, during 13-15, Thrissur, Kerala, India, June 2013.
- [10]. RS Goswami et. al, “*A Morphological Segmentation and Curve-let Features Extraction on Text Region Classification using SVM*”, 2015 IEEE International Conference on Computational Intelligence and Computing Research organised by Vickram College of Engineering, Madurai, Tamil Nadu on 11th December 2015
- [11]. RS Goswami et. al, “*Absolute key variation technique of automatic variable key in cryptography*”, Proceedings of the 8th International Conference on Security of Information and Networks (SIN 2015), September 8-10, 2015 Sochi/Russia, PP: 65-67, ACM Publisher.
- [12]. RS Goswami et. al, “*New way of Generating Variable Keys in Achieving Perfect Security*”, International Conference on Computing and Communication Systems (I3CS’15), 9th -10th April, 2015, NEHU.
- [13]. RS Goswami et. al, “*An efficient packet hiding method for preventing jamming attacks in wireless networks*”, International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), 2016, pp- 2318-2321
- [14]. RS Goswami et. al, “*Intelligent Data Placement in Heterogeneous Hadoop Cluster*”, International Conference on Next Generation Computing Technologies, 2017, pp-568-579
- [15]. RS Goswami et. al, MP Dutta, SK Chakraborty, CT Bhunia, “*Methods to generate variable keys with noise burst bit in modern cryptosystem for achieving perfect security*”, Fourth International Conference on Image Information Processing (ICIIP), 2017, pp-1-6
- [16]. RS Goswami et. al, “*Generating Variable Keys in Automatic Variable Key with Noise Burst Bit in Cryptography towards Data Transfer for Achieving Perfect Security*”, 3rd International Conference for Convergence in Technology (I2CT),2018, pp-1-6

List of patents:

First Ever Nobel Implementation Scheme of Perfect Security: Automatic Variable Key (AVK) in Various Forms. (Applied for)

Conferences/ workshops attended:

Conferences:

- [1.] “*Various New Methods of Implementing AVK*”, **2nd International Conference on Advances in computer Science & Engineering, CSE2013**, Organized by CSE-2013 committee from **1st – 2nd July’ 2013 at Los Angeles, USA.**
- [2.] “*A New Technique (CSAVK) of Automatic Variable Key in Achieving Perfect Security*”, **100th Indian Science Congress Association**, in the month of **January 2013.**
- [3.] “*Cypher Combining Technique to Tackle Error Propagation Behavior of AES*”, **International journal of Current Science & Technology**, Organized by **National Institute of Technology, Arunachal Pradesh on March, 2013.**

Workshops:

- [1.] Recent Trends in Computing & Computer Networking Department of Computer Science & Engineering, NIT Arunachal Pradesh 5 days’ Workshop Under TEQIP III, 3rd -7th September 2018.
- [2.] NKN Third Annual National Workshop, “Next-Generation Network (NGN)”, IIT Guwahati, 15–17 December 2014
- [3.] Internal faculty development programme, Place: NIT Transit House, Guwahati, Speaker: Prof. B P Sinha, Dept. of Computer Science & Engg., ISI – Kolkata.
- [4.] “100th Science Congress”, 3-7 January 2013, Kolkata.
- [5.] NKN 1st annual workshop, “The e-Infrastructure of India”, IIT Bombay, Mumbai, 31 October -2 November 2012
- [6.] Brainstorming workshop,” DEVELOPING R & D PROPOSALS FOR NORTH EASTERN STATES OF INDIA”, Tripura, October 18-19, 2012