Swarnendu Kumar Chakraborty

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Arunachal Pradesh,
791112

Objective

To obtain a challenging position in a high quality engineering environment where my resourceful experience and academic skills will add value to organizational operations.

Qualifications

1. PhD in Computer Science & Engineering in NIT, Arunachal Pradesh in 20154
2. Master of Technology in Information Technology in IIEST Shibpur (BESU) in 2009
3. Bachelor of Technology (B.TECH.) Information Technology from WBUT in 2006

Work experience

NIT Arunachal Pradesh — 2011 — 2017

HOD, CSE

Worked as HoD, Dept. of CSE, NIT Arunachal Pradesh, From 2011 to July 2017.

NIT Arunachal Pradesh — 2017 — 2018

Dean finance

Worked as Dean Finance, NIT Arunachal Pradesh, From 2017-Feb 2018.

NIT Arunachal Pradesh — 2018 — 2020

Prof. In/Charge T&P Cell

Currently Prof. In/Charge T&P Cell, NIT Arunachal Pradesh.

NIT Arunachal Pradesh — 2020 — Till date

Co-ordinator, Employability skill training, UnderTEQUIP-III

Also acting as Co-ordinator, Employability skill training, UnderTEQUIP-III

Publications

A Combined Technique of SC+ MPC+ APC to Achieve Higher Error Correction Probability and Throughput Over APC and MPC Techniques in a Wireless Network
S Ningthoujam, SK Chakraborty
Journal of The Institution of Engineers (India): Series B 101 (2), 107-116
2020

Finding an effective distance between T-cell and B-cell using S/W ARQ in an immune system communication

S Ningthoujam, T Chingkheinganba, SK Chakraborty
China Communications 17 (1), 174-185
2020

DoubleTrApp: A Weak Vertex Cover based DDoS Detection and Mitigation scheme using SDN approach
P Bardalai, N Medhi, SK Chakraborty
2019 IEEE International Conference on Advanced Networks and …
2019

Throughput Analysis of Energy-Efficient Combined Packet Combining-Aggressive Packet Combining Scheme in Two State Scenarios
M Kundu, A Sarkar, SK Chakraborty
Advanced Science, Engineering and Medicine 11 (12), 1279-1282
2019

To Achieve Higher Security in Automatic Variable Key Technique towards Optimum Data Transfer with Noise Burst in Cryptosystem
M Das, RS Goswami, RS Mehta, SK Chakraborty
Asian Journal For Convergence In Technology (AJCT)
2019

Modifications on Aggressive Packet Combining Scheme: An Extension to ARQ Techniques
M Kundu, SK Chakraborty, A Sarkar
Proceedings of International Conference on Sustainable Computing in Science …
2019

Analysis of the adaptive three-modes for PC+ MPC+ APC techniques using retransmission cycle mechanism
S Ningthoujam, SK Chakraborty
Journal of High Speed Networks 25 (2), 205-220
2019

Characterization of Carbon Nanotubes and Its Application in Biomedical Sensor for Prostate Cancer Detection
A Sarkar, S Maity, P Chakraborty, SK Chakraborty
Sensor Letters 17 (1), 17-24
2019

Studies of Optimization of Throughput: Combining Receiver Diversity in Hybrid ARQ Scheme Over Fading Channel
M Kundu, SK Chakraborty
Emerging Technologies in Data Mining and Information Security, 551-558
2019

A 46.8 μW/1.12 GHz 7th Stage New Ring Voltage Controlled Oscillator
M Maiti, SK Saw, V Nath, SK Chakraborty, A Majumder
International Conference on Nanoelectronics, Circuits and Communication …
2018

Provisioning technical interoperability within Zigbee and BLE in IoT environment
T Rahman, SK Chakraborty
2018 2nd International Conference on Electronics, Materials Engineering …
2018

Generating Variable Keys in Automatic Variable Key with Noise Burst Bit in Cryptography towards Data Transfer for Achieving Perfect Security
M Das, RS Goswami, MP Dutta, SK Chakraborty, CT Bhunia
2018 3rd International Conference for Convergence in Technology (I2CT), 1-6
2018

Key variation technique based on piggybacking strategies under public key environments
MP Dutta, S Banerjee, M Das, RS Goswami, SK Chakraborty, CT Bhunia
Journal of Discrete Mathematical Sciences and Cryptography 21 (1), 59-73
2018

Methods to generate variable keys with noise burst bit in modern cryptosystem for achieving perfect security
M Das, RS Goswami, MP Dutta, SK Chakraborty, CT Bhunia
2017 Fourth International Conference on Image Information Processing (ICIIP …
2017

Design of high frequency D flip flop circuit for phase detector application
SK Saw, P Meher, SK Chakraborty
TENCON 2017-2017 IEEE Region 10 Conference, 229-233
2017

Methane-Sensing Performance Enhancement in Graphene Oxide/Mg: ZnO Heterostructure Devices
A Sarkar, S Maity, AM Joseph, SK Chakraborty, T Thomas
Journal of Electronic Materials 46 (10), 5485-5491
2017

Estimation of Power Dissipation in Ternary Quantum Dot Cellular Automata Cell
P Bhattacharjee, K Das, A Dey, D De, SK Chakraborty
Journal of Low Power Electronics 13 (2), 231-239
2017

Factors Influencing On Sensitivity of the Metal Oxide Gas Sensors
A Sarkar, S Maity, P Chakraborty, SK Chakraborty
International Conference on Sustainable and Renewable Energy Development and …
2017

Technique to Generate Variable Keys with Key Variation with Noise Burst Bit for Achieving Perfect Security in Cryptology towards Optimum Data Transfer
M Das, RS Goswami, MP Dutta, SK Chakraborty, CT Bunia
International Journal of Security and Its Applications 11 (3), 39-50
2017

PC-APC schemes in multipath diversity system to get higher throughput
S Ningthoujam, MP Dutta, S Banerjee, CT Bhunia, SK Chakraborty
International Journal of Electrical and Computer Engineering 7 (1), 337
2017

Effect of annealing temperature on Mg-Al co doped ZnO Nano particles synthesized via sol-gel method for gas sensing application
A Sarkar, S Maity, P Chankraborty, SK Chakraborty
Materials Today: Proceedings 4 (9), 10367-10371
2017

Hybrid Protocol for Molecular Communication in Three States Markov Model
SKC Sanjit Ningthoujam , Saikat Kumar Jana , Manash P Dutta , Rajat Subhra ...
JOURNAL OF ENGINEERING TECHNOLOGY 6 (1), 113-123
2017

Two-way Mechanism to Enhance Confidentiality and Accuracy of Shared Information
MP Dutta, S Banerjee, SK Chakraborty, CT Bhunia
International Journal of Electrical and Computer Engineering 6 (4), 1785
2016

Implementation of Ternary Logic in QCA using SPICE Macro-Modeling
Pritam Bhattacharjee , Arijit Dey , Kunal Das, S K Chakraborty, R S Goswami
JOURNAL OF ENGINEERING TECHNOLOGY 5 (2), 143-155
2016

Studies of several new modifications of Aggressive Packet Combining to achieve higher throughput, based on correction capability of disjoint error vectors
SK Chakraborty, RS Goswami, CT Bhunia, A Bhunia
Journal of the Institution of Engineers (India): Series B 97 (2), 269-272
2016

Design and implementation of TG based D flip flop for clock and data recovery application
SK Saw, M Maiti, P Meher, SK Chakraborty
IET Digital Library
2016

Synthesize of ZnO Nano structure for toxic gas sensing application
A Sarkar, S Maity, P Chakraborty, S Kr
Procedia Computer Science 92, 199-206
2016

A study to examine the superiority of CSAVK, AVK over conventional encryption with a single key
RS Goswami, SK Chakraborty, CT Bhunia
2016

Investigation of Two New Protocols of Aggressive Packet combining scheme in achieving better throughput
SK Chakraborty, RS Goswami, A Bhunia, CT Bhunia
Journal of the Institution of Engineers (India): Series B 96 (2), 141-145
2015

Technical Session-I: Network Protocols, Venue: Room# 2
S Ningthoujam, SK Chakraborty, CT Bhunia, K Sarma
International Conference on Computing and Communication Systems (I3CS'15) 9, 10
2015

New protocol for aggressive packet combining in gilbert two state model using back up routes to achieve higher throughput
S Ningthoujam, SK Chakraborty, CT Bhunia
Proceedings of the 2015 International Conference on Advanced Research in …
2015

New Investigations of Aggressive Packet Combining Scheme to Reduce Transmission Delay and Three States Markov Model Using Multiple Routes to Increase Throughput
S Ningthoujam, SK Chakraborty, CT Bhunia
International Journal of Future Generation Communication and Networking 8 (5 …
2015

New modified technique of Aggressive packet combining scheme with multiple routes selection to get high error correction and throughput
S Ningthoujam, SK Chakraborty, CT Bhunia
Published to International Journal of Advanced Electronics & Communication …
2014

New techniques for generating of automatic variable key in achieving perfect security
RS Goswami, SK Chakraborty, A Bhunia, CT Bhunia
Journal of The Institution of Engineers (India): Series B 95 (3), 197-201
2014

Method of Non Majority Decision Making in Aggressive Packet Combining Scheme
SK Chakraborty, RS Goswami, A Bhunia, CT Bhunia
2014 11th International Conference on Information Technology: New …
2014

New protocol of aggressive packet combining in Gilbert two state model
SK Chakraborty, RS Goswami, A Bhunia, CT Bhunia
Proceedings of The 2014 International Conference on Control, Instrumentation …
2014

New Protocol of Aggressive Packet Combining Scheme
Y Bulo, SK Chakraborty, CT Bhunia
International Journal of Computer Applications 85 (6)
2014

Generation of automatic variable key under various approaches in cryptography system

RS Goswami, SK Chakraborty, A Bhunia, CT Bhunia 2013
Journal of The Institution of Engineers (India): Series B 94 (4), 215-220

Two New Modified Schemes of Aggressive Packet Combining Schemes in Achieving Better Throughput
SK Chakraborty, RS Goswami, A Bhunia, CT Bhunia 2013
2013 10th International Conference on Information Technology: New …

New approach towards generation of Automatic Variable Key to achieve Perfect Security
RS Goswami, SK Chakraborty, A Bhunia, CT Bhunia 2013
2013 10th International Conference on information technology: new …

Three New Investigations of Aggressive Packet Combining to Get High Throughput
SK Chakraborty, RS Goswami, A Bhunia, CT Bhunia 2013
International Journal of Computer Applications 81 (5)

Approach towards Optimum Data Transfer with Various Automatic Variable Key (AVK) Techniques to Achieve Perfect Security with Analysis and Comparison
RS Goswami, SK Chakraborty, A Bhunia, CT Bhunia 2013
International Journal of Computer Applications 82 (1)

Various new methods of implementing AVK
RS Goswami, SK Chakraborty, A Bhunia, CT Bhunia 2013
Proceedings of the 2nd International Conference Advanced Computer Science …

A new technique (CSAVK) of automatic variable key in achieving perfect security
CT Bhunia, SK Chakraborty, RS Goswami 2013
100th Indian Science Congress Association, 1-4

Workshops

Workshops attended:

1. Networking in Linux Platform, July 2013, CMC Kolkata, India
2. Implementation of Reservation Policy in Service Matters for SC/ST/OBC/E-Servicemen/PWD in Govt. Institutes, Govt. Aided Bodies and Compassionate Cases, August 2017, Society for Economic Research & Training (SERT), New Delhi, India
3. Faculty Induction Workshop (TEQIP III), June 2018, IIT Kharagpur, India
4. Optimization Techniques in Engineering Applications, August 2018, Department of Civil Engineering, NIT Arunachal Pradesh, India
5. Big Data Analysis and Machine Learning (TEQIP III), April 2019, Dr. B. R. Ambedkar Institute of Technology (DBRAIT), Port Blair, India
6. Recent Trends in High Voltage and Power System Engineering (TEQIP III), August 2018, Department of Electrical Engineering Engineering, NIT Arunachal Pradesh, India
7. Artificial Intelligence (ATAL, AICTE), September 2019, Department of Computer Science & Engineering, NIT Arunachal Pradesh
8. Block Chain Technology (ATAL & TEQIPIII), February 2020, Department of Computer Science & Engineering, NIT Arunachal Pradesh, India
9. 12th National Cyber Defence Summit 2019, Dr. Ambedkar Institute of Technology, Bengaluru, 18th-19th October, 2019.
10. ESIC 2020, 1st International Conference on Electronic Systems and Intelligent Computing, 2nd -4th March, 2020, Dept. of ECE, NIT Arunchal Pradesh.
11. “ONLINE TEACHING PEDAGOGY IN HIGHER EDUCATION”, 11-14 June 2020, By National Institute of Food Technology Entrepreneurship & Management
12. RBCDSAI’s International Summit on Data Science and AI conducted from 18th–20th June 2020 organised by the Robert Bosch Centre for Data Science and Artificial Intelligence,Indian Institute of Technology Madras

Workshops organized:

1. Recent Trends in Computing & Computer Networking (TEQIP III), September 2018, Department of Computer Science & Engineering, NIT Arunachal Pradesh, India
2. Cyber Security (ATAL & TEQIPIII), February 2020, Department of Computer Science & Engineering, NIT Arunachal Pradesh, India

Students guided / Ongoing

PhD:

1. Ashish Singh Parihar, **Area of Work:** Distributed Systems (2020 Ongoing)
2. Ganesh Kumar Mahato, **Area of Work:** Cryptography (2020 Ongoing)
3. Anil Ram, **Area of Work:** SDN (2020 Ongoing)
4. Taibur Rahman, **Area of Work:** IoT (2020 Ongoing)
5. Argha Sarkar, **Area of Work:** Methane Sensing Platform Using ZnO and Graphene Based Sensing Layers through Structural Modification, January 2016 - November 2018
6. Achyuth Sarkar, **Area of Work:** To Study and Analysis of Modified Aggressive Packet Combining (APC) Scheme with Consideration of Physical Signals and Voltage Division Multiplexing
7. Sanjit Ningthoujam, **Area of Work:** The Performance of multipath ARQ protocols to achieve higher throughput in Wireless Networks and Molecular Communication, January 2016 - February 2020
8. Madhusudan Maiti, **Ph.D. Thesis Title:** “Design of Power Efficient CDR Circuit Constituents for Serial Data Communication”, Defense Seminar Date: 15th July 2020, SMDP C2SD Project (Funding Agency: MIETY)
9. Mayuri Kundu, **Ph.D. Thesis Title:** “Implementation and Throughput Optimization of Various ARQ Mechanisms in Different Channels” 21st August’ 2020.

M.Tech:

1. Ashish Singh Parihar, Index Based Approach in Hadoop Ecosystem for Performance Improvement, 2019
2. T Chingkheinganba, Finding an effective distance between T-cell and B-cell using S/W ARQ in an immune system communication, 2019
3. Umang, Design a new algorithm of Distributed Mutual Exclusion and Implementation in Machine Learning, 2018
4. Taibur Rahman, Provisioning Technical Interoperability within ZigBee & BIE in IoT Environment, 2018
5. Priyanka Bardalai, Vertex Cover based DDoS Detection and Mitigation Scheme using SDN approach, 2018
6. Avinash Maurya, Lightweight IoT Protocol Realizing Smart IT & Communication, 2017
7. Rohit Kumar, Analysis of throughput and mean energy consumption of Multi hopped Aggressive Packet Combining Scheme, 2016
8. Sanjit Ningthoujam, Investigation of Packet Combining and Aggressive Packet Combining Schemes to get Higher Throughput and wide Flexibility, 2015

B.Tech:

1. Kaushal Kumar Prajapati, Yase Dusu, Deepak Roy: Skin Lesions Diagnosis System.
2. Nimit Khandelwal, Balwant Saharan, Vaibav Pandey, Pancham Lal: IoT Based Battlefield Monitoring System.
3. Debashis Deb, Tangha Lendom, Supratim Das, Saurabh Kumar: An Approach to Develop Protocol for Improvement of Packet Transfer Rate in Existing APC.
4. Pralay Kumar Das, Ashanideepta Bhattacharya, Neha Tripathi, Saraswati Panthi: Mechanism to Prevent DDoS Attack over Wireless Network.

Key Skills

Languages: C, Core JAVA, J2EE, JavaScript, JQuery.
Database: MySQL , Oracle .

Technical subjects

- Operating system
- Digitalcircuits
- Database
- Compilers
- Theory of Computation
- Data Structure
- Algorithms
- Distributed systems

Interests

- Cricket
- Playing Chess
- Table tennis
- Music

References

References available upon request.

Declaration

I hereby declare that all the above information is true to the best of my knowledge and belief.

Date: 18 Oct 2020
Current Place: NIT Arunachal Pradesh