

## Prof. M. Tariq Banday

Professor and Head

Department of **Electronics** and **Instrumentation Technology**, University of Kashmir, Srinagar, India

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SKYPE ID: tariq.banday URL: www.banday.in



### ◎ BRIEF PROFILE ◎

I envision transforming this institution into a great seat of learning and scholarship. I will strive for an effective e-governance-enabled accountability system; practice, motivate, and equip teachers with advanced teaching, pedagogical, and professional skills encompassing 21st-century competencies, including critical thinking, problem-solving, digital and technological literacy, and global awareness. I will set up a robust system of quality assurance, quality sustenance, and quality promotion to improve University grading and ranking further.

### ◎ EDUCATION ◎

**Ph. D.** Feb 2011 **M. Phil.** July 2008 **M. Sc.** Sep 1995 **B. Sc.** July 1991 **DOEACC A & O Levels** July 2002 & July 1998 **UGC NET DEC 1997 & JUNE 1998**

### ◎ CORPORATE LIFE ◎

**PARTICIPATION** in Technical, selection, central purchase, and admission advisory committees, DIQA steering, placement, DRC, BORS, etc. **DEVELOPED** over 20 software packages including a provident fund management package for SKUAST and various conference websites. **ATTENDED** over a dozen subject related refresher and orientation courses. **PARTICIPATED** and attended over 80 conferences within and outside the country. **SUPERVISED** over 100 PG and UG major projects. **DELIVERED** invited lectures and participated in panel discussions, session chairs in reputed research events. **HELD ADMINISTRATIVE POSITIONS** and mobilized funds, introduced new academic programmes and courses, established laboratories, installed equipment, drafted statutes, placement brochures, and accreditation approval documents and participated in institutional quality assurance, ranking and admissions.

### ◎ WORK EXPERIENCE ◎

**TEACHING:** 23 Years at PG and UG Level **RESEARCH:** 15 Years **INDUSTRY:** 5 Years **ADMINISTRATIVE AND MANAGERIAL:** 13 Years

### ◎ TEACHINGS ◎

“Courses in the disciplines of electronics, computer & information technology at undergraduate and postgraduate levels including **Processor Design, Internet of Things, Low-level programming, Embedded System Design, Digital Forensics, Programming and Problem Solving, Data Structures, Component Level Experimentation and diverse Software in ESD and Embedded Systems**”

### ◎ RESEARCH ◎

**PUBLICATIONS** – Full Length: **195**, Abstracts: **90 FUNDED PROJECTS: 7 (INR 7 Crores)** **AREAS** – Topics in Computational Electronics, Network Security & Forensics. **Organised** over ten research events within and outside the country. **Association** with reputed professional academic societies and bodies. **PRODUCED TEN PHD AND MPHIL** scholars.

### ◎ HONOURS ◎

**Vint Cerf** (Vice President, Google Inc) famously known as the father of the Internet for his co-invention of the TCP/IP protocol wrote the foreword for my edited book in 2019. **RECEIVED** appreciation award from Honourable Vice-Chancellor, best paper presentation awards. **PARTICIPATED** as Vice-Chancellor’s nominee at various forums, on editorial boards of various reputed journals and conferences, etc.

### ◎ INTERESTS & HOBBIES ◎

I prefer **EDITORIAL WRITING** and **READING**, and I am an active member of academic debate teams. I have a passion for high terrain driving, chess, table tennis and the like. I spend my leisure time with family and friends. Sometimes, I meditate to get away from daily stress and refresh.



# CURRICULUM VITAE

## M. TARIQ BANDAY

### CURRENT POST & POSITION:

**Professor and Head of the  
Department**

URL: [WWW.BANDAY.IN](http://WWW.BANDAY.IN)

### CONTACT:

#### OFFICE ADDRESS:

Department of Electronics  
and Instrumentation  
Technology  
University of Kashmir,  
Hazratbal, Srinagar,  
190006, India.

#### HOME ADDRESS:

130, Saderbal, Hazratbal,  
Srinagar, 190006, India.

#### PHONE NUMBER:

(+91) 94 1954 8922

#### E-MAIL IDS:

sgrmtb@yahoo.com  
banday@ieee.org

#### SKYPE ID:

tariq.banday

### 1. PROFILE

I am serving as Professor at the University of Kashmir and have 23 years of experience in teaching courses at undergraduate and postgraduate levels in Computational Electronics and about five years of industrial experience in computer training and consultations and servicing and repair of electronic equipment. I have supervised over 100 PG and UG major projects and 10 PhD and MPhil thesis, edited seven books, published about 200 full-length articles as journal papers, conference proceedings and book chapters and about 80 presentations in seminars and symposiums. I have mobilised about INR 7 crore through funded research projects and schemes and introduced new academic programmes and courses, established laboratories and installed new equipment. I have held key administrative and managerial positions and drafted statutes, placement brochures, and accreditation approval documents and participated in institutional quality assurance, ranking and admissions. I have associations with reputed professional academic societies and publishing houses and have organised over ten research events within and outside the country. I have developed commercial software and Web applications and am proficient in the use of software for accounting, e-learning, simulations, data analysis and publishing. I believe in the emerging approach of education where a teacher presents new information in the context of what students already know and help them to develop understanding and skills through activity and reflection. I love to explore and experiment with new technology and believe in self-learning, e-learning, life-long learning and collaborations.

### 2. EDUCATION

**Ph. D. Electronics (E-mail Security)** Feb 2011

**Thesis:** Design and Development of Efficient Techniques for Securing E-mail System from Threats, *University of Kashmir*.

## ONLINE INFORMATION:

### WEBSITE:

<http://www.banday.in>  
<http://electronics.uok.edu.in/MTB.aspx>

### WEB OF SCIENCE ID:

F-2795-2011

### ORCID ID:

[orcid.org/0000-0001-8504-5061](https://orcid.org/0000-0001-8504-5061)

### RESEARCH GATE ID:

[https://www.researchgate.net/profile/M\\_Tariq\\_Banday](https://www.researchgate.net/profile/M_Tariq_Banday)

### GOOGLE SCHOLAR ID:

<http://scholar.google.co.in/citations?user=SJ8cRF8AAAJ&hl=en>

## TEACHING INTERESTS:

Have taught various courses in the disciplines of electronics, computer and information technology at undergraduate and postgraduate levels.

### COMPUTATIONAL ELECTRONICS:

Microprocessors & Microcontrollers (Cortex M, Pic, Intel, etc.): Architecture, Programming and Interfacing, Computer Organization, Design & Architecture, Embedded System Design, Embedded Systems Security and Forensics, Digital Electronics, Digital Logic and Design.

### M. Phil. Electronics (Network Security) July 2008

**Dissertation:** On the Design and Implementation of Efficient and Fast Network Protocols, University of Kashmir.

### M. Sc. Electronics Sep 1995

**Major Project:** Simulation of Intel 8085 Microprocessor using C Language, University of Kashmir.

### B. Sc. Non-Medical (Electronics) July 1991

Islamia College of Science and Commerce, University of Kashmir.

### Advanced Diploma (Computer Science) DOEACC A Level July 2002 and Diploma (Computer Science) DOEACC O Level July 1998

National Institute of Electronics and Information Technology, Srinagar.

### Competitive Examinations: UGC NET Dec 1997 and June 1998

National Eligibility Test (NET) for Lectureship (Electronic Sciences) conducted by the University Grants Commission, Government of India in Dec 1997 and again in June 1998.

## 3. WORK EXPERIENCE

### TOTAL WORK EXPERIENCE:

**TEACHING:** 23 Years at PG and UG Levels;

**RESEARCH:** 15 Years; **INDUSTRY:** 5 Years.

### 3.1. UNIVERSITY OF KASHMIR, Department of Electronics and Inst. Technology.

**PROFESSOR:** Sep 2019 – Current

**ASSOCIATE PROFESSOR:** Sep 2016 – Sep 2019

Was appointed as **Associate Professor** in the Central University of Kashmir in **August 2012**, however, continued in the parent University

**ASSISTANT PROFESSOR: (Stage-III)** July 2013 – Aug 2016

**ASSISTANT PROFESSOR: (Stage-II)** July 2008 – Aug 2013

**ASSISTANT PROFESSOR:** July 2003 – Aug 2008

**LECTURER:** May 2001 – July 2003

### MAJOR HIGHLIGHTS

- Rendered a leading role in ensuring the launch of two-year M. Tech. and four-years B. Tech programs in Electronics & Communication Engineering and Computer Sciences and Engineering in the University by drafting proposals, syllabus, statutes,

**NETWORKING & INTERNET:**

Internet of Things, networking and TCP/IP, data security, Network, Internet, E-mail & Web Security.

**PROGRAMMING****LANGUAGES:**

Programming, Problem Solving, and ALPs, System Software and Operating Systems, OOP, Data Structures, DMBS.

**LABORATORY:**

Component level experimentations with courses in computational electronics. Simulation and emulation software including OrCAD, Multisim, and Proteus. MDK Keil uVision, Simplicity Studio, MP Lab and various C compilers, Boards and kits from Keil, Silicon Labs, NXP, Texas Instruments and MicroElectronika, ULINK Pro, ULINK Plus, ULINK Me, PICkit 3/ICD 3 In-Circuit and Segger debug adaptors for IoT. FRED Workstation, Access Data FTK, Paraben DP2C and E3 Viewer, GSA CAPTCHA Breaker, CAPTCHA Snipper, CrypTool etc. for forensics. Performed experimentation in laboratories through multiple programming languages that include MS Visual Studio.Net (VB.NET, ASP.NET, C#.NET, J#.NET), Visual C++/VB, COBOL, C/C++, PASCAL, JAVA with Borland

and accreditation approval documents, ensuring the establishment of new laboratories, installations of equipment, etc.

- Drafted and presented departmental proposals for funds generation and mobilization from University Grants Commission of India included SAP (2012) and FIST (2002 and 2019) and Department of Electronics and Information Technology, Govt. of India, including VPhD Scheme (2015, 2022 & 2023).
- Earned Excellent Grade for contributions in improving the quality of education in the year 2006.
- Guided over 30 M. Tech., M.Sc. and B. Tech. Major Projects.
- Launched a personal website (<http://www.banday.in>) in 2009 offering e-Learning modules and online assistance to students of M. Sc. Electronics and B. Tech. ECE, besides hosting resource materials.

**ADMINISTRATIVE RESPONSIBILITIES**

- **February 2016 – present:** Head, Department of Electronics and Instrumentation Technology.
- **2013-2019:** Coordinator, UGC, SAP, DRS-Level I (Grant of Rs. 75.00 lacs).
- **Sep 2006 – 2016:** Nodal Officer for Departmental Internal Quality Assurance
- **2016-2020:** Coordinator/Consultant DIQA, UoK.
- **2016 – 2023:** Admission (2016-, NIRF Ranking and NAAC .
- **2020- present:** Coordinator, DST FIST, GOI (Grant of 105 lacs).
- **2015- present** Nodal Officer for Visvesvaraya PhD scheme for Electronics and Information Technology (VPhD Scheme) of MeitY, GOI in KU.

### [3.2. INDIRA GANDHI NATIONAL OPEN UNIVERSITY,](#) New Delhi

**PROJECT GUIDE** July-2000 – present

**ACADEMIC COUNCELLOR** July 2000 – Dec 2003

**MAJOR HIGHLIGHTS**

- MCA students (Guided over a dozen MCA Major Projects).
- PG and UG Distance Education Programs.

### [3.3. MeitY \(MINISTRY OF COMMUNICATIONS & INFORMATION TECHNOLOGY\),](#) New Delhi, Centre for Electronics Design & Technology of India currently



JBuilder, Data Structures through C/C++/JAVA, etc. Have also used Oracle, MS SQL Server, and MS Access in many projects and research works.

### **COURSES TAUGHT:**

Taught diverse courses of B. Tech CSE & ECE, M.Sc. Electronics, MCA and M. Tech. ESS & CSE programmes.  
(details annexed)

### **RESEARCH AREAS:**

#### **COMPUTATIONAL ELECTRONICS:**

Security in Internet of Things (IoT)  
Processor Architecture for IoT

#### **NETWORK SECURITY & FORENSICS:**

E-mail Security, Forensics, Classification, and Spam Control  
Cyber Security and CAPTCHA Challenges  
Cloud Computing and its Security  
Digital Forensics

#### **OTHER RESEARCH AREAS:**

E-learning, E-Governance, and social-media  
Image Processing and Compression Techniques  
Quantum Dot Cellular Automata

National Institute of Electronics and Inf. Tech. NIELIT, Srinagar/Jammu.

**ASSISTANT ENGINEER** Aug 1999 – May 2001

**SENIOR TECHNICAL ASSISTANT** Nov 1996 – Aug 1999

#### **MAJOR HIGHLIGHTS**

- Provided Training in the use of Software to Government employees and consultancy services to overcome the Y2K problem faced by the General Post Office of Srinagar.

#### **3.4. RADIX COMMUNICATIONS PVT. LTD,** New Delhi

**SYSTEM/NETWORK ENGINEER** Jan 1995 – Nov 1996

#### **MAJOR HIGHLIGHTS**

- Software installations, servicing & troubleshooting of communication equipment, computers and peripherals and installation of networks and training.

### **4. RESEARCH PUBLICATIONS** (detailed are annexed)

#### **4.1. FULL LENGTH PUBLICATIONS**

**TOTAL NUMBER OF PUBLICATIONS: 192**

**EDITED BOOKS: 7** – 2019(1) 2018(2) 2017(1) 2016(1) 2015(2)

**BOOK CHAPTERS: 15** – 2023 (1) 2021(4) 2020(3) 2019(3) 2018(1) 2016(2) 2014(1)

**JOURNAL PAPERS: 59** – 2023 (6) 2022 (5) 2021(7) 2020 (4) 2019(4) 2017 (2) 2016(5) 2015(2) 2014(1) 2013(4) 2012(1) 2011(9) 2010(3) 2009(4) 2007(1) 2006(1)

**CONFERENCE PAPERS: 87** – 2023 (1) 2022 (7) 2021(1) 2020(7) 2019(1) 2018 (17) 2017 (3) 2016(4) 2015(8) 2014(5) 2013(10) 2012(4) 2011(5) 2010(4) 2009(4) 2008(4) 2006(2)

**SUBMITTED/ACCEPTED: 24**

#### **4.2 ABSTRACTS/PRESENTATIONS**

**Total Abstracts: 87** – 2018 (35) 2017 (10) 2016(10) 2015(13) 2014(1) 2013(3) 2012(5) 2011(3) 2010(1) 2009(1) 2008(1) 2006(1) 2005(1) 2004(1) 2003(1)

## RESEARCH HIGHLIGHTS:

### VINT CERF WROTE FOREWORD:

An edited book published by IGI Global; USA has been recently promoted by Vent Cerf (commonly known as the father of Internet for his co-invention of TCP/IP), Vice President Google Inc. by writing its foreword.

### E-MAIL DATE SPOOFING:

The reported research results on Identification, detection and prevention of Internet e-mail date spoofing have been used by several commercial e-mail service providers to rectify e-mail date spoofing problem in their mail servers.

### MULTIPLE E-MAIL ADDRESS DSS:

Proposed Multiple E-mail Address Certificates (MEAC) within the existing standards for use with multiple e-mail addresses of users have been made available.

### INDIAN REGIONAL CAPTCHA CHALLENGES:

The designed CAPTCHA scripts for Indian regional languages can be used to generate CAPTCHA tests in websites offering content in Indian languages. The design has overcome implementation challenging such as glyphs, pronunciations, accents, etc.

## 5. FUNDED PROJECTS

**DST, GOVERNMENT of India INR 105 Lacs** (2021-2025).  
Grant in Aid under DST FIST Scheme Level – I File No. SR/FST/ET-I/2019/445

**MeitY, GOVERNMENT of India INR 76.724 Lacs** (2022-2027) **INR 145.232 Lacs** (2023-2028)

**MeitY, GOVERNMENT of India INR 100.826 Lacs** (2015-2020)

Implementation of Visvesvaraya PhD scheme for Electronics and Information Technology (VPhD Scheme)

**MeitY, GOVERNMENT of India INR 47.50 Lacs** (2017-2020)

Design of Low Power, Low Resource Cryptographic Procedures for IoT Security Control.

**SERB DST, GOVERNMENT of India INR 28.359 Lacs** (2017-2020)

Algorithm and Service Design for Indian Regional Language CAPTCHA Challenges, SERB, DST, GOI.

**JKSST, GOVERNMENT of J&K INR 10 Lacs** (2018)

**SERB DST, GOVERNMENT of India INR 2 Lacs** (2018)

**J&K Bank, J&K INR 6 Lacs** (2018)

Organization of 13th Session of Jammu and Kashmir Science Congress (JKSC-2018) at University of Kashmir, Srinagar, 2-4 April 2018 (Partial Financial Assistance).

**J&K Bank, J&K INR 0.70 Lacs** (2015)

**Scientech, Indore INR 0.40 Lacs** (2015)

Organization of 2015 International Conference on Advances in Computers, Communication, and Electronic Engineering (COMMUNE-2015) at University of Kashmir, Srinagar, 16-18 March 2015 (Partial Financial Assistance).

**UGC, GOVERNMENT of India INR 75.00 Lacs** (2012-2018)

UGC Special Assistance Programme (SAP)

**UGC, GOVERNMENT of India INR 11.27 Lacs** (2012-2015)

Design and Development of New E-mail Security Protocols and Forensic Tools, University Grants Commission, Government of India.

**MeitY, GOVERNMENT of India INR 117.5208 Lacs** (Submitted).

Design of Lightweight and Low-Latency Digital Signature Scheme for the Internet of Things Devices.

**SERB-DST, GOVERNMENT of India INR 139.8420 Lacs** (Submitted).

Design of Hardware Oriented Low Power Lightweight Cryptographic Solutions for the Internet of Things

**SCOPUS/WEB OF SCIENCE:**

Papers Indexed: **85**

**OTHER RESEARCH ACTIVITIES:****EVENTS ORGANIZED:**

Organized 13<sup>th</sup> Session of J&K State Science Congress which received over 1200 abstracts, a session in IEEE International Conference in Thailand, four UGC sponsored Seminars (SEEDS), one International Conference (COMMUNE-2015) for which full length papers were published in ISBN proceedings and a few short-term courses.

**LECTURES AND TALKS:**

Delivered invited lectures and participated in panel discussions in over a dozen research events organized within and outside the country on Cyber Security, Internet of Things, e-learning, DSS, etc.

**CHAIRMANSHIP IN CONFERENCES AND SEMINARS:**

Chaired sessions in various reputed research events within and outside the country.

**J&K Bank, J&K INR 2.5 Lacs** (submitted)

Workshop on Cyber Security Awareness, Jammu and Kashmir Bank Ltd.

**J&K Police, GOVERNMENT of J&K INR 5.0 Lacs** (submitted)

TWO days Seminar ENTITLED CYBER SECURITY SUMMIT, JAMMU AND KASHMIR POLICE.

**6. RESEARCH SUPERVISION****6.1. PHD AND MPhil DEGREES AWARDED**

**Ms. Tawheed Jan:** Design and Implementation of Novel Image Forgery Detection and Prevention Techniques, **PhD Degree, AWARDED** on 16-06-2023

**Ms. Shafiya Afzal Sheikh:** Design of Novel Techniques for Securing Email System from Threats using Cryptographic and Filtering Methods **PhD Degree, AWARDED** on 14-11-2022

**Ms. Saima Mehraj:** Design of Efficient Identity and Access Management Techniques for Cloud Computing, **PhD Degree, AWARDED** on 19-02-2022

**Ms. Syed Umira Reyaz:** Efficient Quantum Dot Cellular Automata (QCA) Designs with Applications in Secure Message Communication, **PhD Degree, AWARDED** on 21-12-2020.

**Mr. Javeed Iqbal Reshi:** Realization of Digital Structures using Quantum Dot Cellular Automata, **PhD Degree AWARDED** on 19-12-2016.

**Mr. Reyaz Ahmad Mathangi:** Comparative Study of the Methods for Detection and Prevention of IP Address, **MPhil Degree AWARDED** on 01-03-2016.

**Ms. Syed Umira Reyaz Quadri:** Study and Performance Evaluation of MEMS Based Structures, **MPhil Degree AWARDED** on 27-01-2016.

**Ms. Tawheed Jan Shah:** Study of Various Image Compression Techniques, **MPhil Degree AWARDED** on 12-12-2015.

**Mr. Adil Farooq:** Study of CMOS Frequency Synthesizer in Wireless Communication, **MPhil Degree AWARDED** on 14-03-2016.

**Ms. Shafiya Afzal Sheikh:** Design and Implementation of Efficient Spam Control Techniques for E-mail Security, **MPhil Degree AWARDED** on 02-02-2016.

### **PARTICIPATION IN CONFERENCES AND SEMINARS:**

Participated and attended in about 70 conferences, seminars, workshops and symposia outside and throughout the country.

### **PARTICIPATION IN COURSES:**

Attended over a dozen subject related refresher and orientation courses including courses offered online and on subjects of general nature such as COVID-19.

### **PROFESSIONAL MEMBERSHIPS:**

Professional member of IEEE, member ACM, life member of CSI and member of other professional bodies in Electrical, Electronics and Computer Engineering. Reviewer of various prestigious journals of IEEE, ACM, Taylor and Francis, Elsevier, Inderscience, Oxford, Cambridge and other publishing houses. Member in committees of various government agencies and Universities.

## **6.2. PHD THESIS ONGOING**

### **Security in the Internet of Things**

- Ms. Mir Nazish *Integrated PhD Degree* since September 2020.
- Mr. Ishfaq Sultan *Integrated PhD Degree* since 2017.
- Ms. Safia Gul *integrated PhD Degree* since 2017
- Ms. Qazi Iqra *Integrated PhD Degree* since 2023

### **Web Security, Digital Forensics & AI**

- Ms. Zahrah Ayub *Integrated PhD Degree* since 2023.
- Ms. Mariya Shafat Kirmani *Integrated PhD Degree* since 2017.

### **Cloud Computing**

- Mr. Abdul Wahid *Integrated PhD Degree* since 2017.

## **6.3. RECENT MAJOR PROJECT THESIS (PARTIAL LIST)**

- Cloud Data Security for Distributed Embedded Systems Using Machine Learning and Cryptography.
- Development of an Efficient Machine Learning-based Heterogeneous Multicore CPU Scheduler.
- Hardware Implementation and Real-Time Performance Evaluation of ASCON.
- Hardware Implementation of Block Cipher PRESENT with Secure and Efficient Key Schedule.
- Evaluation of Secure Applications of Wearable IoT using Hexiwear.
- Real Time Performance Analysis of DSP Algorithms on Cortex M Processors.
- Performance and Energy Analysis of Advanced Encryption Standard using Cryptographic Hardware Accelerator and Sleep Modes.
- Hardware Implementation of all variants of AES on FPGA with Combinational logic Based S-box.
- Implementation of CoAP and MQTT Application Layer Protocols for the Internet of Things.
- An analysis of Various Attacks Against RPL in the IoTs.
- Implementation of Customized SIMON/SPECK Family of Lightweight Block Ciphers on Different Hardware Platforms.
- Performance Analysis of Advanced Encryption Standard Algorithm and its Optimization for the Internet of Things.



## SOFTWARE AND WEBSITES DEVELOPED:

Developed about 20 software packages including a provident fund management package for SKUAST and various conference websites

## PARTICIPATION IN CORPORATE LIFE:

Participated as Vice-Chancellors nominee in various technical and selection committees. Participated in various committees including central purchase, admission advisory, DIQA steering, placement, DRC, BORS, etc.

## INTERESTS AND HOBBIES:

I prefer editorial writing and reading, and I am an active member of academic debate teams. I have a passion for high terrain driving, chess, table tennis and the like. I spend my leisure time with family and friends. Sometimes, I meditate to get away from daily stress and refresh.

## 7. HONOURS, AWARDS AND ACHIEVEMENTS

**January 2019: Vint Cerf** (Vice President, Google Inc) famously known as the father of the Internet for his co-invention of the TCP/IP protocol wrote the foreword for my edited book titled as 'Cryptographic Security Solutions for the Internet of Things' which has been published by IGI Global, USA in 2019.

**June 2018:** Received appreciation award from Honourable Vice-Chancellor of the University of Kashmir for contribution in attaining a respectable position in NIRF ranking 2016 and 2017.

**June 2018:** Received best paper presentation award for paper captioned as "A Study of Current Trends in the Design of Processors for the Internet of Things" on 26-27 June 2018 at ACM Conference IFCNDS-2018, Amman, Jordan.

**2016-2019:** Participated as Vice-Chancellor's nominee at various forums including Higher Education Forum organised by Campus Management in association with Engineering Watch at Chandigarh, India (2015), and various selection and technical committees since 2016.

**2018-current:** Serving as a member of the working group on the development of standards for cybersecurity Confederation of Indian Industry (CII) task force on Public-Private Partnership for Security of the Cyber Space, Jacaranda, India Habitat Centre, Lodi Road, New Delhi.

**2017:** Remained a member of the discussion group on security issues and challenges of the Internet of Things, CERTIn, Ministry of Electronics and Information Technology, Government of India.

**2015:** Attended meetings with the committee on petitions of Rajya Sabha (India Parliament) regarding banning of cyber pornography in India.

**2010-current:** Served in various capacities on editorial boards of various reputed journals and conferences.

**2017:** IEEE Senior Member, ACM, New York Member, Computer Society of India Life Member.

## DIVERSITY STATEMENT:

Looking ahead to my new roles at the University, I intend to use my teaching and training skills, research, academic, technical and administrative experiences, professional and personal contacts and position with a commitment to enhancing diversity, equity and inclusion. I shall continue to incorporate diversity into my teaching courses, materials and methods and conduct active research that contributes to the practical wisdom of applied knowledge and enhances the learning experience. I will demonstrate my commitment to dedicated service to the institutional and educational purpose and acceptance of the ideas of the University.

## ENGLISH LANGUAGE TEST:

Obtained an overall band score of 6.5 in IELTS English language examination on 30, January 2020.

## 8. TEACHING AND RESEARCH PLANS

While strengthening my knowledge of existing courses taught by me, I plan to design and prepare additional courses such as FPGA-based processor design, lightweight cryptography, forensics in the Internet of Things, cloud and fog computing, medical and social applications of Internet of Things. I also plan to use additional hardware modules such as Texas Instruments SimpleLink DK/STK, CC2650, CC3200 based boards, UP2 Grove IoT development kit, DesignStart SoC Design Education kit from ARM, Arm MPS2+ FPGA Prototyping boards for prototyping of Cortex M processor cores, Libelium Waspote Mote Runner, Libelium communication modules, and additional sensor boards. I also plan to use DS 5 PRO, and DS-5 debug probes including D-Stream which is a high performance debug and trace probe, DSTREAM-ST Debugger, and I-jet Trace for Arm Cortex-M, I-jet, I-scope for high-resolution power and energy analysis.

In the research domain, I plan to work on Addressing IoT research challenges for security at different layers, Quantum-resistant cryptographic algorithms for the Internet of Things, improve security protocols and classification efficiency of filters, continue working further towards building secure CAPTCHA challenges, investigate persistent and volatile evidence in digital forensic domain and explore applications of Internet of Things particularly for NTDs.

I am committed towards continuing my research endeavours including undertaking funded research projects and working in research groups. I am open to research collaborations and inter-disciplinary research projects.



**Signature**  
**M. Tariq Banday**

## RESEARCH PUBLICATIONS (FULL LENGTH)

### ACCEPTED/UNDER REVISION/SUBMITTED

1. Nazish, M., Banday, M. T. (2023). **Security Concerns in Cloud Computing - A Comprehensive Review** (Submitted)
2. **Modelling of Robust Nano-Scale Code Converters using Quantum Dot Cellular Automata**", Analog Integrated Circuits and Signal Processing. (Submitted)
3. Saima Mehraj, Banday, M. T. (2023), **"Rise of Unauthorised Access to Cloud: A State-of-the-Art Survey of Identity Access Management Practices in Cloud Computing Paradigm"**, (Submitted).
4. Qadri, S. U. R., Bangi, Z. A., Banday, M. T., (2023). **"New Cryptographic Architecture using Quantum Dot Cellular Automata"**, (Submitted).
5. Banday, M.T., Qadri, S.U.R. (2023). **"Material Based Analysis of MEMS Piezoresistive Pressure Sensors"** (Submitted).
6. Bhat L., Khan N., Vaida N., Hassan I., Banday, M. T. (2023), **"Impact of Stigma on Emotions, Thoughts, Behavior and Relationships of Leprosy Patients: A Study"**. (Submitted)
7. Bhat L., Khan N., Vaida N., Hassan I., Banday, M. T. (2024), **"Socioeconomic Development of Leprosy Affected Persons: A Study of Socioeconomic Status and Opportunities for Empowerment"**. (Submitted)

### PUBLISHED IN 2024

### JOURNAL PUBLICATIONS

1. Banday, M. T., Mir, B. J., and Sultan, I. (2024), **An Energy Efficient Encryption Technique for Internet of Things Sensor Nodes**, (Accepted in *International Journal of Information Technology, Springer* ).
2. Sultan, I., Banday, M. T., (2024), **Sub-1 GHz RF-based Energy Efficient IoT Sensor Node" for publication** (Accepted in *Benthnam Science*)
3. Kirmani, M. S., Banday, M. T. (2024). **"Towards Ensuring the Evidence Reliability and Accuracy During Memory Forensics"**, (Submitted).
4. Kirmani, M. S., Banday, M. T. (2024). **"A Conceptual Anti-Forensics Aware Digital Forensic Model for Detection and Mitigation of Anti-Forensic Attacks"**, (Submitted).
5. Kirmani, M. S., Banday, M. T. (2024). **"Enhancing Reliability During Physical Memory Forensics: Strategies and Practices"**, *SN COMPUT. SCI.* 5, 201 (2024). <https://doi.org/10.1007/s42979-023-02553-y>
6. Banday, M. T., Sheikh, S. A. (2024). **"Analysing Security of Text-Based CAPTCHA Challenges – A Study using GSA CAPTCHA Breaker"**, (Submitted).
7. Sheikh, S. A, Banday, M. T. (2024). **"Analyzing a Bot-Based Method for E-mail Address Harvesting and Spamming"**, (Submitted).
8. Wahid, A., Banday, M. T. (2024). **"An Effective Ensemble Transfer Learning approach for Cancer Classification and Prediction using Gene Expression data"**, *Information Sciences* (Submitted)

9. Mir-Nazish, Banday M. T. (2024). **High-Speed Chaotic Map-Based PRESENT Block Cipher for Lightweight Image Encryption**
10. Nazish, M., Banday, M. T. (2024), Nazish, M., Banday, M. T. (2023), **Lightweight Cryptographic Symmetric Block Cyphers for Smart Internet of Things - An Experimental Study**, (Submitted).
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## ABSTRACTS AND PRESENTATIONS

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  59. Banday, M.T., Mathangi, R.A. (2015). "**Communication Networks: Past, Present, and Future (A Review)**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 30.
  60. Banday, M.T., Sheikh, S.A. (2015). "**A Technique to Detect and Prevent Malicious Covert Communication**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 32.
  61. Banday, M.T., Reshi, J.I. (2015). "**Reversible Computing: Motivation, Progress, and Challenges**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 41.
  62. Banday, M.T., Sofi, G.A. (2015). "**Open School: An M-Learning App for Android**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 60.
  63. Banday, M.T., Dar, S.A. (2015). "**Biometrics of Vision: A Comparative Study of Iris & Retinal Biometric Techniques**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 61.
  64. Banday, M.T., Khan, M. (2015). "**Internet of Things (IoT) and Smart Homes: A Design Prospective**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 62.
  65. Jan, T.R., Ahmad, M., Banday, M.T. (2015). "**Internet Usage in Higher Education: Needs Analysis and Satisfaction**", Proceedings of 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, Srinagar, 16-17 March 2015, ISBN: 978-93-82288-59-6, pp. 68.
  66. Banday, M.T., (2015). "**A Study of Recent Advances in Computational Linguistics**", in National Conference on Current Trends in Linguistics – with Special Reference to Kashmiri Language and Linguistics, University of Kashmir, Srinagar, 12-13 August 2015.
  67. Banday, M.T., (2015). "**Inexact Processors: A Study with Reference to Applications for Climate-Modelling**", 11th JK Science Congress 2015 organized by University of Kashmir, Srinagar from 12 to 14 October, 2015.
  68. Javeed Iqbal Reshi, M. Tariq Banday, (2015). "**Reversible Computing: Motivation, Progress and Challenges**", UGC Sponsored National Seminar on Electronic Devices, Systems and Information Security, SEEDS-2015, March 16-17, University of Kashmir (Best Presentation Award).

## YEAR - 2014

69. Banday, M.T., Mattoo, M.M. (2014). "**Social Media Use in Higher Education**", in National Symposium on Perspectives on Metrics Based Research Evaluation, organized by Department of Library and Information Science, University of Kashmir, Srinagar, 10<sup>th</sup> Mar to 12<sup>th</sup> Mar 2014.

## YEAR - 2013

70. Sheikh, S.A., Banday, M.T. (2013). "**Optimization of Bayesian Filters for Multi-Lingual Spam Filtering**" in International Conference on Operations Research on Data Analytics and Decision Analysis in Conjunction with the 46<sup>th</sup> Annual Convention of Operational Research Society of India (ORSI) (ICORDADA-13) organized by Department of Statistics, University of Kashmir, Srinagar from 21<sup>st</sup> Oct to 23<sup>rd</sup> Oct, 2013.
71. Banday, M.T. (2013). "**e-Governance: A Study of Citizen Awareness and Demands**" in Two Days state level conference on Emerging Trends in Business Education: Challenges and Prospects organized by Department of Management Studies, Islamia College of Science & Commerce, India, 29-30 Mar 2013.
72. Jan, T.R., Ahmed, M., Banday, M.T. (2013). "**Internet usage in Higher Education: Needs Analysis and Satisfaction**" in 9<sup>th</sup> J&K Science Congress and Regional Science Congress organized by University of Kashmir in collaboration with J&K State Council for Science and Technology and DST, Govt. of India at University of Kashmir, **Srinagar** from 1<sup>st</sup> Oct to 3<sup>rd</sup> Oct, 2013.

## YEAR - 2012

73. Banday, M.T. (2012). "**Web 2.0 use in e-Governance**", The Second International Conference on Digital Information and Communication Technology and its Applications from May 16-18, 2012, University of the Thai Chamber of Commerce (UTCC), Bangkok, **Thailand**, Technical co-sponsor by IEEE Thailand Section.
74. Banday, M.T. (2012). "**ICT Integration in School Education in India: Challenges and Solutions**" in 1<sup>st</sup> International ICT Conference, 8<sup>th</sup> to 11<sup>th</sup> February, 2012, Organized by MATE, IATEFL and British Council in **Marrakech, Morocco**.
75. Banday, M.T. (2012). "**e-Libraries in Web 3.0 World**" in Two Days conference on Emerging Frontiers of Digital Libraries organized by Department of Library and Information Science, University of Kashmir, Srinagar, India, 5-6 Nov 2012.
76. Banday, M.T. (2012). "**ICT4E: Where do we Stand?**" in two days National Seminar on Emerging Frontiers of Digital Libraries, Perspectives, Empowerment and Advocacy (2011 – 12) from 13<sup>th</sup> to 14<sup>th</sup> March, 2012, organized by Department of Library and Information Science, University of Kashmir, **Srinagar, India** sponsored by UGC, New Delhi, India.
77. Banday, M.T., (2012), "**Enriching Engineering Education through ICT,**" 8<sup>th</sup> J&K Science Congress, 17<sup>th</sup>-19<sup>th</sup> September 2012, University of Kashmir, Srinagar, **India**.

## YEAR - 2011

78. Banday, M.T. (2011). "**Challenges and Opportunities of Current Advances in DNS**", in 7<sup>th</sup> J&K Science Congress, 13<sup>th</sup> to 15<sup>th</sup> Oct. 2011, Jammu University, **Jammu**.

79. Banday, M.T. (2011). "**E-mail Date Spoofing: A Study of its Detection and Implications**", in 7<sup>th</sup> J&K Science Congress, 13<sup>th</sup> to 15<sup>th</sup> Oct. 2011, Jammu University, **Jammu**.
80. Banday, M.T. (2011). "**Ensuring Authentication and Integrity of Open Source Software using Digital Signature**", in OSSS 2011, National Seminar on Open Source Software Systems Challenges and Opportunities organized by Department of Library and Information Sciences and Department of Computer Sciences, University of Kashmir from 20<sup>th</sup> June to 22<sup>nd</sup> June 2011.

#### YEAR - 2010

81. Banday, M.T., Mir, F.A. (2010). "**Authentication of Electronic Records in India – A Techno-Legal Analysis**", Presented in 6<sup>th</sup> J&K Science Congress, 2<sup>nd</sup> to 4<sup>th</sup> Oct. 2010, University of Kashmir.

#### YEAR - 2009

82. Banday, M.T., Mir, F.A. Shah, N.A. (2009). "**Socio-legal Control of Spamming**", In International Conference on Law and Social Obligations: The way Forward", Organized by Faculty of Law, University of Kashmir and Ahmad Ibrahim Kulliyah of Laws, International Islamic University, Malaysia from 10<sup>th</sup> and 11<sup>th</sup> August 2009.

#### YEAR - 2008

83. Jan, T.R., Banday, M.T., Hussain, I. (2008). "**Control Chart Based on Percentile Ranked Set Sample with Equal Samples**," In International conference on new trends in statistics and optimization", Department of Statistics, University of Kashmir, Srinagar, India, from 20<sup>th</sup> to 23<sup>rd</sup> October, 2008.

#### YEAR - 2006

84. Banday. M. T. (2006). "**A Study of Applications of Nanotechnology**" in Two day "National Seminar on Recent Trends in Nanotechnology", Department of Electronics & IT, University of Kashmir and Department of Science and Technology, Govt. of India, from 19<sup>th</sup> to 20<sup>th</sup> June 2006.

#### YEAR - 2005

85. Banday. M. T. (2005). "**A Review of Industrial Applications of Soft Computing**" in Two day National Seminar on Advances in Soft Computing, organized by Department of Electronics & Instrumentation Technology, University of Kashmir, Srinagar, India and Department of Science and Technology, Govt. of India on 7<sup>th</sup> and 8<sup>th</sup> October, 2005

#### YEAR - 2004

86. Banday. M. T. (2004). "**Copyright, Trademark and Patent in India**" in Two Days Workshop on Patent Awareness Programme", organized by Department of Electronics & Instrumentation Technology, University of Kashmir, Srinagar, India and Department of Science and Technology, Govt. of India on 15<sup>th</sup> and 16<sup>th</sup> October, 2004.

#### YEAR - 2003

87. Bandy. M. T. (2003). "**C and Embedded Systems Design**" in One day "National Seminar on Embedded Systems and Solutions", organized by Department of Electronics & Instrumentation Technology, University of Kashmir, Srinagar, India on 10<sup>th</sup> July, 2003.

### MAJOR PROJECTS SUPERVISED (PARTIAL LIST)

- |  |   |
|--|---|
| <b>M. TECH. ESS (2023)</b><br>SADAF BASHIR<br>SUGAIRYA FIRDOUS           | 1. <b>Cloud Data Security for Distributed Embedded Systems Using Machine Learning and Cryptography</b>  |
| MUNEEB UL ISLAM  | 2. <b>Development of an Efficient Machine Learning-based Heterogeneous Multicore CPU Scheduler</b>  |
| TARIEF-I-BARI  | 3. <b>Hardware Implementation and Real-Time Performance Evaluation of ASCON</b>   |
| SAMEER SULTAN  | 4. <b>Low-Cost Evapo Track Auto Fill PAN- Evaporimeter based on Internet of Things (IoT)</b>  |
| MUNAZAH  | 5. <b>Diffuse Pyranometer Automation for Enhanced Radiometry</b>  |
| <b>M. TECH. ESS (2022)</b><br>SHEENA TAHIR BANDAY<br>MUZAMIL ROUF        | 6. <b>Analyzing Impact of Rainfall on Black Carbon Aerosols Using Regression Technique</b>  |
| INSHA SYED   | 7. <b>Diffusion Layer for Lightweight Block Ciphers and its Efficient Software Implementation for PRESENT Algorithm</b>                                     |
| SUHAIL ASHAQ   | 8. <b>Configurability of ARM Cortex-M3 Core and its FPGA Implementation</b>   |
| MEHVISH ALI  | 9. <b>Design, Implementation and performance analysis of Bit-Slicing Present Encryption Algorithm for Cortex M Cores</b>                                    |
| NASEER AHMAD LONE  | 10. <b>FPGA Implementation of Lightweight Block Ciphers and their Area Optimization</b>   |
| <b>M. TECH. ESS (2020)</b><br>MUDASSIR YASIN LONE<br>MOHAMMAD OWAIS BHAT | 11. <b>Lightweight Block Ciphers for the Internet of Things and their Optimization for Implementation in Hardware</b>                                       |
| AADIL BASHIR   | 12. <b>Energy Optimization of Battery Powered Devices for Efficient Hardware Implementation of Lightweight Encryption Techniques</b>                        |
| ARSALAN BASHI  | 13. <b>Hardware Implementation of Block Cipher PRESENT with Secure and Efficient Key Schedule), University of Kashmir.</b>                                  |
|  | 14. <b>Performance and Energy Analysis of Advanced Encryption Standard using Cryptographic Hardware Accelerator and Sleep Modes, University of Kashmir.</b> |
|  | 15. <b>Hardware Implementation of all variants of AES on FPGA with Combinational logic Based S-box, University of Kashmir.</b>                              |
|  | 16. <b>Implementation of Customized SIMON/SPECK Family of Lightweight Block Ciphers on Different Hardware Platforms, University of Kashmir.</b>             |

**AIJAZ AHMAD MIR**

**M. TECH. ESS (2019)**  
**FAIZAN ZAHID QAZI**

**SAMIYA MAJID BABA**

**SAJAD AHMAD**

**AB. NAYEEM KHAN**

**PERVAIZ YOUSUF**

**M. TECH. ESS (2018)**  
**MIR NAZISH**

**TAZMEEN NAZIR**

**SYED SAALIM SHABIR**  
**BUKHARI**

**SYED SUHAIL AHMAD**  
**SIMNANI**

**SAMEENA SHAH**

**M. SC. ELECTRONICS**  
**(2021)**

**M. SC. ELECTRONICS**  
**(2018)**

**M. SC. ELECTRONICS**  
**(2018)**

**B. TECH. ECE (2017)**

17. **Hardware Implementation of Advanced Encryption Standard (AES) Using Anubis Substitution Box for IoT Applications**, University of Kashmir.
18. **Study of Different Network Setups** (Communication Protocols) using Volaysys Modular Gateway and End Device Networks/NXP Rapid IoT Kit), University of Kashmir.
19. **Evaluation of Secure Applications of Wearable IoT using Hexiwear**, University of Kashmir.
20. **Real Time Performance Analysis of DSP Algorithms on Cortex M Processors**, University of Kashmir.
21. **Secure Implementation of IoT Based ECG/EMG Monitoring**, University of Kashmir.
22. **Secure and Remote Fingerprint Authentication for User Authorization at IoT Nodes**, University of Kashmir.
23. **Implementation of CoAP and MQTT Application Layer Protocols for the Internet of Things**, University of Kashmir.
24. **An analysis of Various Attacks Against RPL in the Internet of Things**, University of Kashmir.
25. **A Lightweight Data Encryption Standard for Securing Fog Nodes in the Internet of Things**, University of Kashmir.
26. **Performance Analysis of PRESENT Cryptographic Algorithm and its Optimization for the Internet of Things**, University of Kashmir.
27. **Performance Analysis of Advanced Encryption Standard Algorithm and its Optimization for the Internet of Things**, University of Kashmir.
28. **GPS Based Smart Irrigation System**, University of Kashmir  
*STUDENTS: NAZIA FAROOQ, MUZAMIL AHMAD DAR, TABISH AMIN, FARHANA MUSHTAQ, FAQRUN NISA, FARHAN FAYAZ*
29. **Sun Tracking Solar Panel**, University of Kashmir.  
*STUDENTS: IRSHAD AHMAD DAR, TAWSEEF AHMAD WANI, ISHFAQ AHMAD WANI, MUNEEB AHMAD GANIE*
30. **Alcohol Detection & Automatic Machine Shutdown**, University of Kashmir.  
*STUDENTS: HILAL AHMAD BHAT, YOUNIS FAYAZ, SARFARAZ AHMAD SOFI, ABDUL BARI, RAQEEB AHMAD LONE*
31. **Android Controlled Automatic Temperature Regulation in a Shoe with Inbuilt Pedometer**, University of Kashmir.  
*STUDENTS: MOHAMMAD TAHA SHAH, MOHAMMAD TAWQEER AHANGER, MUSAIB MEHRAJ, DANISH MUSHTAQ ZARGAR, RIZWAN MANZOOR ZARGAR*



**M. SC. ELECTRONICS  
(2016)**

32. **Smart Helmet - A Complete Life Saving Gadget for Two-Wheeler Enthusiasts**, *University of Kashmir.*

STUDENTS: LUBNA MALIK, KHUSHBOO FAYAZ QURESHI, MEHAK SHAFI, SABRINA KHURSHEED

**B. TECH. ECE (2016)**

33. **Design and Development of GSM Based Weather Monitoring System**, *University of Kashmir.*

STUDENTS: NUZHAT HAMEED, AFREENA ALTAF, ARIFA WAZIR, ABDUL RAOOF AND YAWER ABASS MIR

**B. TECH. ECE (2016)**

34. **Digital Capacitor Leakage Meter Using PIC 16F88 Microcontroller**, *University of Kashmir.*

STUDENTS: SANIA NAZIR, MIR NAZISH, JASIEA RAFIQ

35. **Arduino Based Speech Guided Obstacle Avoidance System for Visually Impaired Citizens**, *University of Kashmir.*

STUDENTS: YASIR SADIQ, OMER RATHER, LUBNA AHAD, MARIYA BASHIR, SAHAR IQBAL

**M.SC. ELECTRONICS (2015)**

36. **Design of Adaptive Array Antenna Using HFSS**, *University of Kashmir.*

STUDENTS: IMTIYAZ LONE, FAIZA AKBAR, MANZOOR WANI, JAHANGEER UL NAZIR, HASHIM KHARADI

**B.TECH. ECE (2015)**

37. **GSM Based Wireless Notice Board**, *University of Kashmir.*

STUDENTS: ANEEQ-UL-HAMID, BAZILA PARVEZ, IRTIQA MEARAJ, NOUREEN QADIRI

**M. SC. ELECTRONICS  
(2014)**

38. **Tuneable Air Quality Monitoring System**, *University of Kashmir.*

STUDENTS: ISHFAQ SULTAN, AYASH AHMAD YATOO, AMBREEN ZAHOOR

**M. C. A. (2014)**

39. **Secure Online Leave Tracking System**, *Indra Gandhi National Open University.*

STUDENT: SHAKEEL AHMAD DAR

**M. C. A. (2014)**

40. **Open School: An m-Learning App for Android**, *Indra Gandhi National Open University.*

STUDENTS: GULZAR ALI SOFI

**M. C. A. (2014)**

41. **Secure online File Tracking System**, *Indra Gandhi National Open University.*

STUDENT: JAVAID AHMAD RATHER

**M. C. A. (2013)**

42. **eShare: File Sharing Web Portal System**, *Indra Gandhi National Open University.*

STUDENT: RUKSHANDA HAFIZ

**M. SC. ELECTRONICS  
(2011)**

43. **Smart Vehicle Security System**, *University of Kashmir.*

STUDENTS: MUSHTAQ AHMAD WAR, TEJINDER PAL SINGH, MUZAFFAR AHMAD RATHER, MUHAMMAD ABDUL RABB

## MAJOR EVENTS ORGANIZED

KASHMIR UNIVERSITY SRINAGAR	<b>State Science Congress</b>	1. Organized " <b>13<sup>th</sup> Session of Jammu and Kashmir Science Congress</b> " (JKSC-2018) from 2 <sup>nd</sup> to 4 <sup>th</sup> April 2018 in the University of Kashmir.
UTCC BANGKOK, THAILAND	<b>International Conference (Session)</b>	2. Organized a Session on " <b>Web 2.0: Opportunities, Challenges and Solutions</b> " in the Second International Conference on Digital Information and Communication Technology and its Applications from May 16-18, 2012, University of the Thai Chamber of Commerce (UTCC), Bangkok, <b>Thailand</b> .
KASHMIR UNIVERSITY SRINAGAR	<b>National Seminar</b>	3. Organized " <b>Seminar on Electronic Devices, Systems, and Information Security</b> " (SEEDS-2018) on 3 <sup>rd</sup> April 2018 in the University of Kashmir, Srinagar.
		4. Organized " <b>UGC Sponsored Seminar on Electronic Devices, Systems, and Information Security</b> " (SEEDS-2017) on 24 and 25 March 2017 in the University of Kashmir, Srinagar.
		5. Organized " <b>UGC Sponsored Seminar on Electronic Devices, Systems, and Information Security</b> " (SEEDS-2016) on 18 and 19 March 2016 in the University of Kashmir, Srinagar.
	<b>International Conference</b>	6. Organized " <b>UGC Sponsored Seminar on Electronic Devices, Systems, and Information Security</b> " (SEEDS-2015) on 16 and 17 March 2015 in the University of Kashmir, Srinagar.
KASHMIR UNIVERSITY SRINAGAR		7. Organized " <b>International Conference on Computers, Communication and Electronic Engineering</b> " (COMMUNE-2015) from 16 to 18 March 2015 in the University of Kashmir, Srinagar.
	<b>Short Term Course</b>	8. Organized a " <b>Short Term Course on Mechatronics</b> " in the Department of Electronics & Instrumentation Technology in collaboration with Academic Staff College, University of Kashmir and National Institute of Technology, Srinagar at UoK, NIT and <b>KGP, Srinagar</b> , June 2011.

## LECTURES AND TALKS

ICECMA CONFERENCE	<b>SP College Srinagar</b>	1. Delivered an Invited lecture on Processors for the Internet of Things in two days International Conference
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- on Electronics and Computational Multidisciplinary Advances, SP College Srinagar on 9-10 November 2022.
- |                             |  |  |
|-----------------------------|--|--|
| PANEL DISCUSSION            | <b>UCS, Damam, Saudi Arabi</b>                                   | 2. Three-Lectures on " <b>Networking, Cyber Security and Internet of Things</b> ", Ultra Computer Services Inc, Damam, Saudi Arabi on 13 <sup>th</sup> , 14 <sup>th</sup> and 15 <sup>th</sup> October 2019.   |
| NATIONAL CONFERENCE         | <b>BGSBU, Rajouri, J&amp;K</b>                                   | 3. Lecture captioned as " <b>Processors for Internet of Things</b> " in Emerging Trends and Innovations in Electronics and Communication Engineering (ETIECE-2017), BGSBU, Rajouri, J&K on 26-27 August 2017.  |
| PANEL DISCUSSION CONFERENCE | <b>JKSC-2018 Kashmir University</b>                              | 4. Coordinated and participated in a panel discussion captioned as " <b>Towards Building Cyber Security Awareness and Responsible Cyber Culture within the Society</b> " in 13 <sup>th</sup> Session of Jammu and Kashmir Science Congress on 4 <sup>th</sup> April 2018 from 2:30 PM to 4:30 PM.  |
| UGC ORIENTATION COURSE      | <b>Library Science Kashmir University ASC Kashmir University</b> | 5. Lecture captioned as " <b>Importance of Open Data in Research</b> " in OpenCon 2017, Srinagar on 4 <sup>th</sup> March 2017.<br>6. Lecture captioned as " <b>Applications of ICT and E-Learning in University Education</b> " in 70 <sup>th</sup> General Orientation Course organized by UGC Human Resource Development Centre, University of Kashmir, Srinagar on 29, January 2016. |
| UGC FDP                     | <b>Islamia College Srinagar</b>                                  | 7. Lecture captioned as " <b>ICT and e-Learning in Higher Education</b> " in One Week UGC Sponsored Faculty Development Workshop organized by Islamia College of Science & Commerce, Srinagar from 24 Mar to 30 Mar 2014.  |
| UGC REFRESHER COURSE        | <b>ASC Kashmir University</b>                                    | 8. Lecture captioned as " <b>A Tutorial on Digital Signature Certificates</b> " in Refresher Course on Basic and Applied Science organized by the UGC Academic Staff College, University of Kashmir, Srinagar from 7 <sup>th</sup> May to 28 <sup>th</sup> May 2013.   |
| SHORT TERM COURSE           | <b>NITTTR, Chandigarh</b>  | 9. Lecture on " <b>Digital Signature Certificates</b> " in Short Term Course on Wireless Communication and Networks organized by Department of Computer Sciences, NITTTR, Chandigarh, July, 2011.  |
|                             | <b>Electronics Kashmir University</b>                            | 10. Lecture on " <b>Programming Languages</b> " in Short Term Course on Mechatronics organized by Department of Electronics & Instrumentation Technology in collaboration with Academic Staff College, University of Kashmir and NIT, Srinagar at UoK, NIT and KGP, Srinagar, June 2011.   |

11. Lecture on “**Advanced Digital Logic**” in Short Term Course on Mechatronics organized by Department of Electronics & Instrumentation Technology in collaboration with Academic Staff College, University of Kashmir and NIT, Srinagar at UoK, NIT and KGP, Srinagar, June 2011.
12. Lecture on “**Computer Controlled Mechatronics and Microcontrollers**” in Short Term Course on Mechatronics organized by Department of Electronics & Instrumentation Technology in collaboration with ASC, University of Kashmir and NIT, Srinagar at UoK, NIT and KGP, Srinagar, June 2011.

### PROFESSIONAL SERVICES (PARTIAL LIST)

IEEE, NJ USA	1. Reviewer, <b>IEEE Transactions on Information Forensics and Security</b> .
ELSEVIER, USA	2. Reviewer, <b>Journal of Network and Computer Applications</b> .
	3. Reviewer, <b>Computers &amp; Security</b> .
OXFORD, USA	4. Reviewer, <b>The Computer Journal</b> .
TAYLOR AND FRANCIS	5. Reviewer, <b>International Journal of Electronics</b> .
INDERSCIENCE	6. Reviewer, <b>Int. J. of Business Intelligence and Data Mining</b> .
AIRCC	7. Reviewer, <b>International Journal of Network Security &amp; Its Applications</b> .
ATISR ACADEMIC	8. Reviewer, <b>International Journal of Electronic Commerce Studies</b> .
IEEE/ACM/ETC. CONFERENCES	9. Served as Technical Programme Committee member of over 50 Conferences and Seminars of repute and reviewed over 200 research publications.
MICT, GOI, NEW DELHI	10. Member of <b>Project Review &amp; Steering Group (PRSG)</b> for the project “Real Time Monitoring of Water Quality of Dal Lake, Srinagar using Wireless Sensor Network” under evaluation by National Institute of Electronics & Information Technology Srinagar/Jammu, <b>Ministry of Communications &amp; Information Technology, Department of Electronics &amp; Information Technology</b> .
NIEIT, NEW DELHI	11. External Expert for Accreditation and Students Project Evaluations, <b>National Institute of Electronics &amp; Information Technology, GOI</b> .
IGNOU, NEW DELHI	12. External Expert for UG, PG & Project Evaluation, <b>Indra Gandhi National Open University</b> .
BITE, LONDON, UK	13. Research Coloration in Network Security, <b>Department of Computer Sciences, British Institute of Technology &amp; E-Commerce, London, UK</b> .

LAW DEPARTMENT,  
KU, SRINAGAR

14. Research collaboration in Cyber Laws, **Department of Law, University of Kashmir.**

### PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS (PARTIAL LIST)

- |                                  |   |
|----------------------------------|---|
| IEEE, NJ <b>USA</b>              | 1. <b>IEEE</b> Professional Member (#90247611).   |
| CSI, MUMBAI, <b>INDIA</b>        | 2. Lifetime Member of Computer Society of India ( <b>CSI</b> ) (#I0173397).   |
| ACM, NEW YORK, <b>USA</b>        | 3. Professional Member Academy of Computer Machinery ( <b>ACM</b> ) (#4494784).   |
| IAE, HONG KONG, <b>CHINA</b>     | 4. <b>International Association of Engineers</b> , Member, Societies of Computer Sciences, Electrical Engineering, Internet Computing and Web Services, and Scientific Computing. |
| CSTA, NJ <b>USA</b>              | 5. Member, <b>Computer Science Teachers Association.</b>  |
| INTERNET SOCIETY, VA, <b>USA</b> | 6. Member, <b>Internet Society</b> , Indian Chapter, Bangalore, Malaysians Chapter.   |
| IACSIT, <b>SINGAPORE</b>         | 7. Member, <b>International Association of Computer Science and Information Technology.</b>   |
| MIR LABS, <b>USA</b>             | 8. Member, <b>Machine Intelligence Research</b> Labs.   |
| CSST, GENT, <b>BELGIUM</b>       | 9. Member, The <b>Institute for Computer Sciences, Social Informatics and Telecommunications Engineering.</b>   |
| SIO, NEW YORK, <b>USA</b>        | 10. Member, <b>Science and Information Organization.</b>  |
| ADFSL, VIRGINIA, <b>USA</b>      | 11. Member, <b>Association of Digital Forensics, Security and Law.</b>  |
| SDIWC, <b>USA</b>                | 12. The <b>Society of Digital Information and Wireless Communications.</b>  |

### COURSES, PACKAGES AND LANGUAGES TAUGHT (PARTIAL LIST)

- |         |  |
|---------|--|
| COURSES | 1. Microcontroller for Embedded System Design, Embedded System Design with ARM Cortex Microcontrollers, Embedded System Security and Forensics, Internet of Things, Computer Organization, Architecture and Design, Embedded Systems Design with Microcontrollers, Microprocessors and Assembly Language Programming, Data Communication, Networking and TCP/IP, Data Security, Database Management System, System Software and Operating Systems, Data Structures, Maintenance and Servicing of PC's, Information Systems, System Analysis and Design, Programming and Problem-Solving Techniques, Object Oriented Systems, Digital Electronics, Digital Logic and Design, etc. |
|---------|--|



PACKAGES AND  
LANGUAGES

APPLICATION  
SOFTWARE

2. **Operating Systems:** MS Windows, SCO UNIX, Linux, Novel Netware.
3. **Programming Languages:** MS Visual Studio.Net (VB.NET, ASP.NET, C#.NET, J#.NET), Visual C++/VB, COBOL, C/C++, PASCAL, JAVA with Borland JBuilder, Data Structures through C/C++/JAVA etc.
4. **Database Management:** Oracle/Developer, SQL Server, MS Access, Visual FoxPro, dBase etc. **Suites:** MS Office, Lotus Smart Suite, Adobe Suite, CorelDraw Suite, etc.
5. **Accounting Packages:** Tata EX, Tally, Wings.
6. **Drafting and Simulation Packages:** Proteus, AUTOCAD, ORCAD, PSPICE, Multisim, Electronic Workbench, Circuit Maker, MatLab, Keil, etc.
7. **Website Development:** CMS Systems: Joomla, Drupel, WordPress, DotNET Nuke, etc.

### SOFTWARE AND WEBSITES DEVELOPED (PARTIAL LIST)

SEEDS-2019  
WEBSITE

1. **Websites:** Developed website (www.seeds2019.in) for 2019 Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2019), **January, 2019.**

JKSC-2018  
WEBSITE

2. **Websites:** Developed website (www.jksc2018.in) for 13<sup>th</sup> Session of Jammu and Kashmir Science Congress (JKSC-2018), **January, 2018.**

SEEDS-2017  
WEBSITE

3. **Websites:** Developed website (www.seeds2017.in) for 2017 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2017), **January, 2017.**

SEEDS-2016  
WEBSITE

4. **Websites:** Developed website (www.seeds2016.in) for 2016 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2016), **January, 2016.**

COMMUNE-2015  
WEBSITE

5. **Websites:** Developed website (www.commune.co.in) for 2015 International Conference on Advances in Computers, Communication, and Electronic Engineering (COMMUNE-2015). **March, 2015.**

SEEDS-2015  
WEBSITE

6. **Websites:** Developed website (www.seeds2015.in) for 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015). **March, 2015.**

MS OUTLOOK  
LANGUAGE ADDIN

7. **Language Add-in for MS Outlook 2013:** An Add-in for MS Outlook (2007-2013 Versions) for automatically classifying e-mails in language specific folders. **April, 2013.**

- MAIL CLIENT 8. **E-mail Client:** POP3/IMAP e-mail client with digital signature certificate support, **Jan, 2013.**
- FUNDOFFICE 9. **FundOffice:** A provident fund management package for SKUAST, **June, 2003** updated in 2018.
- WEBSITES 10. **Websites:** Dynamic Websites using ASP.NET and various CMS's including Joomla, Drupel and DotNet Nuke. **2005 – 2010.**
- DOEACC OFFICE 11. **DOEACCOffice:** A Software package for computer institutes, **Dec, 2003.**
- AUTOCLINIC 12. **AutoClinic:** A clinical lab package, **July, 2002.**
- CLOCK 13. **Clock:** Analog and digital desktop alarming clock, **June, 2001.**
- CWK 14. **CWK:** Cross Word Construction Kit, **June, 2001.**
- KATHBATH 15. **KathBath:** A text to speech package using MS Agent, **May, 2001.**
- 8085 SIMULATOR 16. **8085 Simulator:** Simulation for 8085 Microprocessor, **Dec, 1996.**

### PARTICIPATION IN CORPORATE LIFE (PARTIAL LIST)

- JUNE, 2021 - PRESENT 1. Member, Sub-Academic Advisory Committee of NIELIT J&K at Srinagar.
- DEC, 2018 – NOV, 2020 2. **Vice Chancellor's nominee** in the reconstituted Board of Studies for under-graduate courses of Electronics and EEM offered at Islamia College of Science and Commerce, Srinagar, for a period of two years vide order No. 612, dated: 08/12/2018.
- APRIL, 2018- PRESENT 3. Confederation of Indian Industry (**CII**) Task Force on Public Private Partnership for Security of the Cyber Space, Jacaranda, India Habitat Centre, Lodi Road, New Delhi – A Working Group on PPP in Development of Standards for Cyber Security.
- AUGUST 2014- PRESENT 4. **Vice-Chancellors Nominee** for Technical Committee of project entitled "Ecology, monitoring, recovery and bio prospection of some threatened plant species of Jammu, Kashmir and Ladakh in relation to regional socio-economic development, under investigation of Dr. Manzoor Ahmad Shah, Department of Botany.
5. **Vice-Chancellors Nominee** for Selection Committee for selection of two JRF position under the ISRO sponsored research projects under investigation of Prof. Shakil Ahmad Romshoo, Department of Earth Science.

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6. Member **Technical Committee** of MRP captioned as Study of Pure and ion embedded iron oxide nanostructure ..... Wates from water: under investigation of Dr. G. N. Dar, Department of Physics.
  7. **Technical Committee** member of UGC SAP granted in favour of Department of Physics.
  8. **Technical Committee** Member of BVOC programmes of Directorate of Distance Learning, University of Kashmir.
  9. Member of **Central Purchase Committee**, University of Kashmir.
  10. **Technical Committee** member for project Under investigation of Dr. Gh. Jeelani, Department of Earth Sciences.
  11. **Technical Committee** member for project captioned as "Geological Characterization ....." of Dr. Rakesh Chandra, Department of Earth Science.
- JULY, 2018
12. **External Expert** for assessment of UGC sponsored MRP entitled "Study of Germanium/III-V Compound Semiconductor as Channel Material for Nano Scale Devices" under PI Prof Rakesh Vaid, Department of Electronics, University of Jammu.
- SEP, 2016 – PRESENT
13. **Head**, Department of Electronics and Instrumentation Technology, University of Kashmir, Srinagar.
- FEB, 2016 – SEP, 2016
14. **Coordinator**, Department of Electronics and Instrumentation Technology, University of Kashmir, Srinagar.
- 2017
15. Member **Discussion Group on Security issues** and challenges of IoT, CERTIn, Meity, GOI.
- JUNE, 2015
16. Meeting with **Committee on Petitions of Rajya Sabha** on the Petition filed by Jain Acharya Vijay Ratnasundersuri regarding banning of Cyber Pornography in India on 25/06/2015 at Hotel Lalit Grand Palace, Srinagar.
- JULY 2021
17. Meeting with **Parliamentary standing committee** on 5<sup>th</sup> July 2021, at NIT, Srinagar.
- 2017-PRESENT
18. Member **Steering Committee** for **NAAC** (2023) (2017). Member for filling **NIRF** (2023-2016)
- 2014 – 2019
19. Member, University **Admission Advisory Committee**.
- 2003-2016
20. **Nodal Officer**, Departmental Internal Quality Assurance Cell (**DIQA**).

- 2015-PRESENT 21. **Nodal Officer** for implementation of **VPhD** scheme of MeitY in University of Kashmir.
- 2003-PRESENT 22. **Member**, Departmental **Purchase Committee**, Time Table Committee, Selection Committees.
- 2015 23. Member, **Committee for Reforms in Practical Examinations**.
- 2003-PRESENT 24. Member, **Departmental Research Committee**.
- 2003-PRESENT 25. Member, **Board of Studies** for M. Sc. Electronics (2003-present), Board of Studies, Board of Studies for B. Sc. Electronics (2003-present), Board of Studies for M. Tech. ESS (2016-present), Board of Studies for B. Tech. in ECE (2008-2013), Member, Board of Studies for B.Sc. IT (2003-2010).
- 2003-2012 26. **Tour In-charge**, Placement Committee.
- 2003-PRESENT 27. **Organizer**, research events such as conferences, workshops, seminars, and short-term courses/internships.
- 2001-PRESENT 28. Participated in **paper setting, conduct of examination and evaluation of answer scripts**.
- 2006-PRESENT 29. Participated in various **University activities** that include committee for robes, procession, and photographs in the Annual University Convocation of 2008, committee for farming of B. Com syllabus, etc.
- OCT 2020-PRESENT 30. Member Bio-Safety Sub-committee of the University Research Council of the University of Kashmir for a period of 3-years,

### CHAIRMANSHIPS IN CONFERENCES AND SEMINARS

- SESSION CHAIR  
BANKOK,  
THAILAND 1. Session Chair and Organizer of session captioned as Web Applications in **DICTAP2012 SDIWC**, Bangkok, Thailand organized by University of Thai Chamber of Commerce, Bangkok, Thailand on 16-18 May **2012**.
- SESSION CHAIR  
SJCE, MYSORE 2. Session Chair in International Symposium on Security in Computing and Communication in **ICACCI'13** organized by SJCE, Mysore, India from 22-14 August **2013**.
- SESSION CHAIR  
HIMACHAL  
PRADESH 3. Session Chair of Parallel Session 1 on 18 Dec, 2011 (14:00 – 16:00 hrs) in International Conference on **Recent Advances in Electronics & Computer Engineering** organized by Eternal University, Himachal Pradesh, India on 17-18 Dec. **2011**.
- SESSION CHAIR  
LIS, KASHMIR  
UNIVERSITY 4. Session Chair (Open Access Scholarly Communication Part 1) in Two Days National Conference on Changing Dimensions of Scholarly Communications and Role of Libraries to Attain

Inclusive Knowledge Society organized by Department of **Library and Information Science**, University of Kashmir, Srinagar on 6-7 September **2022**.

5. Session Chair (Open Access Scholarly Communication) in Two Days National Conference on Changing Dimensions of Scholarly Communications and Role of Libraries to Attain Inclusive Knowledge Society organized by Department of **Library and Information Science**, University of Kashmir, Srinagar on 6-7 September **2022**.
6. Session Chair in National Symposium on Perspectives on Metrics Based Research Evaluation organized by Department of **Library and Information Science**, University of Kashmir, Srinagar from 10<sup>th</sup> March to 12<sup>th</sup> March **2014**.
7. Session Chair in National Seminar on **Emerging Frontiers of Digital Libraries** organized by Department of Library and Information Science, University of Kashmir, Srinagar from 5<sup>th</sup> and 6<sup>th</sup> November, **2012**.
8. Session Chair in National Seminar on **Emerging Frontiers of Digital Libraries**, Perspectives, Empowerment and Advocacy organized by Department of Library and Information Science, University of Kashmir, Srinagar from 13 March to 14 March **2012**.
9. Session Chair in National Seminar on **Open Source Software Systems Challenges and Opportunities** organized by Department of Library and Information Science and Department of Computer Sciences, University of Kashmir, Srinagar from 20<sup>th</sup> June to 22<sup>nd</sup> June, **2011**.
10. Session Chair in National Workshop on **Research Methods and Statistical Techniques organized** by Department of Library and Information Science, University of Kashmir, Srinagar from 14-16 March, **2011**.

## PARTICIPATION IN CONFERENCES, SEMINARS, COURSES, ETC.

**ICICC-2024)**  
NEW DELHI, INDIA

**IEEE-STCR 2023,**  
TAMIL NADU, INDIA

**VLSI-SYSTEM  
DESIGN  
WORKSHOP 2023  
INDIA**

1. 7th International Conference on Innovative Computing and Communication (ICICC 2024), 16-17th February 2024.
2. Third International Conference on Smart Technologies, Communication and Robotics 2023 (IEEE-STCR 2023). Tamilnadu, India.
3. One Week Workshop on VLSI to System Design: Silicon to End Application Approach organized by AICTE, ARM Education and STMicroelectronics from 31-07 to 4-8-**2023**.



**CSIT-WORKSHOP  
2023,**  
UOK, INDIA

4. Expert in Workshop on Fundamental Glossary of Electronics (English-Hindi-Kashmiri) 21-08 to 25-08-**2023**, Commission for Scientific and Technical Terminology, Ministry of Education, GOI.

**IEEE-ICSSIT 2023,**  
TIRUNELVELI, INDIA

5. 5th International Conference on Smart Systems and Inventive Technology (ICSSIT 2023) organized by Francis Xavier Engineering College, Tirunelveli, India on 23-25, January **2023**.

**IEEE-STCR 2022,**  
TAMIL NADU, INDIA

6. Second International Conference on Smart Technologies, Communication, and Robotics **2022** (IEEE-STCR 2022) organised by the Department of ECE, EIE & BME during 10 – 11, December **2022**.

**WHO, 2020**

Completed the following Courses of WHO during COVID-19 Epidemic:

7. COVID-19: Operational Planning Guidelines and COVID-19 Partners Platform to support country preparedness and response (March 21, **2020**).
8. Infection Prevention and Control (IPC) for Novel Coronavirus (Covid-19) (April 6, **2020**), WHO.
9. Simulation Exercise Management: Introduction (March 21, **2020**) by World Health Organization (WHO).
10. WHO Pre-Deployment Pack:GO 2.0 (March 21, **2020**), WHO.
11. Competency-Based Learning: Introduction (March 21, **2020**), WHO.
12. Incident Management System (Tier 2) (March 22, **2020**) Working in WHO's Incident Management System.
13. Health Cluster Coordination online learning module assessments (March 24, **2020**), Global Health Cluster, WHO.
14. Health Cluster Coordination online learning modules, Global Health Cluster, (March 24, **2020**), WHO

**CONFERENCE  
ICCMC 2020,**  
TAMIL NADU, **INDIA**

15. ICCMC 2020, 4th International Conference on Computing Methodologies and Communication, 11-13 March **2020**, Surya Engineering College, Erode, Tamil Nadu, India.

**CONFERENCE  
ICCCI 2020,**  
COIMBATORE,  
**INDIA**

16. ICCCI 2020, 2020 International Conference on Computer Communication and Informatics, SS Institute of Engineering and Technology, Coimbatore, India, 22-24 January **2020**.

**CONFERENCE  
ICKSSD 2019, NEW  
DELHI, **INDIA****

17. ICKSSD 2019, International Conference on Knowledge and Policy for Sustainable Development: Global Lessons and Local Challenge, Guru Gobind Singh Indraprastha University, New Delhi, India from 25-27 September **2019**.

**CONFERENCE  
HRMIOTM, NEW  
DELHI, **INDIA****

18. TEMP-2019, International Conference on Emerging Trends in Electro-Mechanical Technologies and Management

CONFERENCE  
CHRIST ACADEMY,  
BENGALURU, **INDIA**

IEEE **USA**  
ONLINE

MIDDLE EAST  
UNIVERSITY  
AMMAN, **JORDAN**

ELSEVIER  
ONLINE

ELSEVIER  
ONLINE

TAYLOR'S  
UNIVERSITY  
SELEGOR,  
**MALAYSIA**

CONFERENCE  
UTCC, BANGKOK,  
**THAILAND**

CONFERENCE  
MATE, **MOROCCO**

UNESCO  
BANGKOK,  
**THAILAND**

CONFERENCE  
KLAIPEDA,  
**LITHUANIA**

CONFERENCE  
VALENCIA, **SPAIN**

FERDOWSI  
UNIVERSITY OF  
MASHHAD, **IRAN**

HEF  
CHANDIGARH,  
**INDIA**

organized by HMR Institute of Technology and Management, New Delhi from 26-27 July **2019**.

19. Anveshana-2019, International Conference on Envisioning the Future for Knowledge Engineering at Christ Academy, Bengaluru in association with CSI, and Bangalore University from 8-9 March, **2019**.
20. Completed a course captioned "Embedded Computing for IoT Applications in on 9 June **2018**.
21. Attended 2nd International Conference on Future Networks and Distributed Systems (ICFNDS-2018) organized by Middle East University, Amman, Jordan in June 26-27, **2018**.
22. Completed a module captioned "Successful Research Grant Applications – Getting it Right" on 12 June 2018.
23. Completed a module captioned "How to Review a Manuscript" on 12 June **2018**.
24. Taylors 6th Teaching and Learning Conference 2013 (TTLc 2013), organized by Taylor's University, lakeview Campus, Selangor, **Malaysia**, 23<sup>rd</sup> Nov, **2013**.
25. Second International Conference on Digital Information and Communication Technology and its Applications from 16-18 May, **2012**, University of the Thai Chamber of Commerce (UTCC), **Bangkok, Thailand**.
26. 1st International ICT Conference, from 8-11 Feb, **2012**, organized by MATE, IATEFL, and British Council at **Marrakech, Morocco**.
27. Essential and Decision-Making Modules in UNESCO Bangkok e-learning series on Information and Communication Technology in Education on 23 Nov, **2011**. (online).
28. The Second International Conference on Digital Information Processing and Communications (ICDIPC12), 10-12 July, **2012**, Klaipeda University, Klaipeda, **Lithuania**. (Web Conferencing).
29. CYBERLAWS 2012, the Third International Conference on Technical and Legal Aspects of the e-Society from January 30 to February 4, **2012** at **Valencia, Spain**. (Web Conferencing).
30. Third International eConference on Computer and Knowledge Engineering (ICCKE 2013) organized by Ferdowsi University of Mashhad, **Iran** on 31<sup>st</sup> Oct and 1<sup>st</sup> Nov, **2013**. (Web Conferencing).
31. Participated as Vice-Chancellors Nominee in Higher Education Forum organized by Campus Management in association with Engineering Watch at JW Marriott, Chandigarh on 24 March **2015**.

CONFERENCE  
BANGLORE, **INDIA**

CONFERENCE  
COE, KERELA,  
**INDIA**

CONFERENCE  
MUMBAI, **INDIA**

CONFERENCE  
HIMACHAL  
PRADESH, **INDIA**

WORKSHOP  
**CDAC**  
BANGALORE,  
**INDIA**

CONFERENCE  
ACM,  
BANGALORE,  
**INDIA**

CONFERENCE  
SJCC, MYSORE,  
**INDIA**

SYMPOSIUM  
SJCC, MYSORE,  
**INDIA**

SEMINAR  
AMU, ALIGARH,  
**INDIA**

TTTI  
CHANDIGARH,  
**INDIA**

CONFERENCE  
SMVD, KATRA,  
**INDIA**

CONFERENCE  
ISLAMIA COLLEGE,  
SRINAGAR, **INDIA**

32. 2014 International Conference on Advances in Electronics, Computers and Communications (ICAIECC), organized by Reva Institute of Technology and Management, **Bangalore, India**, 10-11 October, **2014**.
33. IEEE International conference on Engineering Education: Innovative Practices and Future Trends (AICERA 2012), organized by Amal Jyothi College of Engineering, Kanjirappally, **Kerela, India** from 19-21 July, **2012**.
34. World Congress on Information and Communication Technologies (WICT 2011) from 11-14 Dec, **2011** Organized by University of Mumbai, **Mumbai** and **MIR Labs, USA** at University of Mumbai, **Mumbai, India**.
35. International Conference on Recent Advances in Electronics & Computer Engineering, 17-18 Dec. 2011, Eternal University, **Himachal Pradesh, India**.
36. Workshop on PKI Outreach Programme (POP), organized by Centre for Development of Advanced Computing (CDAC) Bangalore in University of Kashmir, **Srinagar, India** from 27-28 April, **2011**.
37. International Conference COMPUTE11, organized by ACM Bangalore Chapter, **Bangalore, India** from 25-26 March, **2011**.
38. International Conference on Advances in Computing, Communications and Informatics (ICACCI-2013) organized by SJCC College of Engineering, **Mysore**, from 22<sup>nd</sup> Aug to 25 Aug **2013**.
39. International Symposium on Security in Computing and Communications (SSCC-13) organized by SJCC College of Engineering, **Mysore, India** from 22<sup>nd</sup> Aug to 25 Aug **2013**.
40. National workshop on Signal Processing Applications in Networked Multimedia, organized by DSR Programme, Department of Electronics Engineering, **AMU Aligarh**, on 19 March, **2005**.
41. Training Programme on Computer Programming at Technical Teachers Training Institute, (TTTI) **Chandigarh, India** from 14 Feb–10 Mar, **1994**.
42. International Conference on Machine Intelligence Research and Advancement, ICMIRA-2013, **Katra, J&K, India** from 21-23 December **2013**.
43. Conference on Emerging Trends in Business Education: Challenges and Prospects, organized by PG Department of Management Studies, Islamia College of Science & Commerce, **Srinagar, India**, from 29-30 Mar, **2013**.

CONFERENCE  
LINGUISTICS,  
SRINAGAR, INDIA  
REFRESHER/  
ORIENTATION  
COURSE  
ASC, SRINAGAR,  
INDIA

44. National Conference on Current Trends in Linguistics – with Special Reference to Kashmiri Language and Linguistics, University of Kashmir, **Srinagar**, 12-13 August **2015**.
45. Refresher Course in Basic and Applied Sciences organized by Academic Staff College, University of Kashmir, **Srinagar, India** from 7th May to 28th May **2013**.
46. 45th General Orientation Course, organized by Academic Staff College, University of Kashmir, **Srinagar, India**, from 15 Feb-14 Mar, **2007**.
47. Refresher Course in Computer Applications, organized by Academic Staff College, University of Kashmir, **Srinagar, India** from 17 Nov-7 Dec, **2006**.
48. National Symposium on Perspectives on Metrics Based Research Evaluation, organized by Department of Library and Information Science, University of Kashmir, **Srinagar**, 10<sup>th</sup> Mar to 12<sup>th</sup> Mar **2014**.

SYMPOSIUM/  
CONFERENCE/  
SEMINAR  
LIS, SRINAGAR,  
INDIA

49. Conference on Emerging Frontiers of Digital Libraries, organized by Department of Library and Information Science, University of Kashmir, **Srinagar, India** from 6-7 Nov, **2012**.
50. Conference on Emerging Frontiers of Digital Libraries, Perspectives, Empowerment and Advocacy (2011 – 12) from 13-14 March, **2012**, organized by, University of Kashmir, **Srinagar, India** sponsored by UGC, New Delhi, India.
51. National Seminar on Open Source Software Systems Challenges and Opportunities, organized by Department of Library and Information Sciences and Department of Computer Sciences, University of Kashmir, **Srinagar** from 20-22 June, **2011**.
52. National Workshop on Research Methods and Statistical Techniques, organized by Department of Library and Information Science, University of Kashmir in collaboration with UGC Academic Staff College, University of Kashmir, **Srinagar, India** from 14-16 March, **2011**.
53. National workshop on Patent Awareness Programme, organized by Department of Electronics & Instrumentation Technology, University of Kashmir, **Srinagar, India** and Department of Science and Technology, Govt. of India on 15-16 Oct, **2004**.
54. 33rd All India Criminology Conference, organized by the Faculty of Law, University of Kashmir in collaboration with Indian Society of Criminology at **Srinagar, India** from 22-24 Oct, **2009**.

CONFERENCE  
LAW, SRINAGAR,  
INDIA

WORKSHOP  
COMMERCE,  
SRINAGAR, INDIA

CONFERENCE  
STATISTICS,  
SRINAGAR, INDIA

WORKSHOP  
USIC, SRINAGAR,  
INDIA

CONFERENCE  
KASHMIR/JAMMU  
UNIVERSITY, INDIA

55. International Conference on Law and Social Obligations: The Way Forward, organized jointly by University of Kashmir, Srinagar and Ahmad Ibrahim Kulliyah of Laws, Malaysia in University of Kashmir, **Srinagar, India** on 10-11 Aug, **2009**.
56. Workshop on Re-structuring of Commerce Curriculum at Undergraduate Level, organized by Department of Commerce, University of Kashmir, **Srinagar, India** on 15-16 Nov, **2008**.
57. International Conference on Operations Research on Data Analytics and Decision Analysis in Conjunction with the 46th Annual Convention of Operational Research Society of India (ORSI) (ICORDADA-13) organized by Department of Statistics, University of Kashmir, **Srinagar, India** from 21<sup>st</sup> Oct to 23<sup>rd</sup> Oct, **2013**.
58. International Conference on New Trends in Statistics and Optimization, organized by Department of Statistics, University of Kashmir, **Srinagar, India**, from 20-23 Oct, **2008**.
59. National workshop on Advanced Computing for Statistics & Optimization for Young Statisticians and Scientists using Software, organized by Department of Statistics, University of Kashmir, **Srinagar, India**, on 22 Oct, **2008**.
60. Workshop on Promoting Innovations in Individuals, Start-ups and Micro, Small & Medium Enterprises (PRISM) and Technopreneurship Promotion Programme (TePP) Sensitization, organized by TePP Outreach Centre (TUC), USIC, University of Kashmir and Mechanical Engineering Department, NIT, **Srinagar** on 13, Oct, **2012**.
61. 13<sup>th</sup> JK Science Congress organized by University of Kashmir, Srinagar from 2-4 April **2018**.
62. 11<sup>th</sup> JK Science Congress 2015 organized by University of Kashmir, Srinagar from 12 to 14 October, **2015**.
63. 9<sup>th</sup> J&K Science Congress and Regional Science Congress organized by University of Kashmir in collaboration with J&K State Council for Science and Technology and DST, Govt. of India at University of Kashmir, **Srinagar, India** from 1<sup>st</sup> Oct to 3<sup>rd</sup> Oct, **2013**.
64. 8<sup>th</sup> J&K Science Congress (JKSC-12) organized by University of Kashmir in collaboration with J&K State Council for Sc and Tech at University of Jammu, **Jammu** from 13-17 Sep, **2012**.
65. 7<sup>th</sup> J&K Science Congress (JKSC-11) organized by University of Jammu in collaboration with J&K State Council for Science and Technology at University of Jammu, from 13-15 Oct, **2011**.
66. 6<sup>th</sup> J&K Science Congress, organized by the University of Kashmir, **Srinagar**, 2-4 Dec, **2010**.



CONFERENCE/  
SEMINAR/  
SHORT TERM  
COURSE  
ELECTRONICS,  
KASHMIR  
UNIVERSITY, INDIA

67. 4<sup>th</sup> J&K Science Congress, organized by the University of Kashmir, **Srinagar** on 12-14 Nov, 2008.
68. 2018 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2018)" University of Kashmir, **Srinagar**, 3 April **2018**.
69. 2017 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2017)" University of Kashmir, **Srinagar**, 24-25 March **2017**.
70. 2016 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2016)" University of Kashmir, **Srinagar**, 18-19 March **2016**.
71. 2015 International Conference on Advances in Computers, Communication, and Electronic Engineering (COMMUNE-2015)" University of Kashmir, **Srinagar**, 16-18 March **2015**.
72. 2015 National Seminar on Electronic Devices, Systems and Information Systems (SEEDS-2015)" University of Kashmir, **Srinagar**, 16-17 March **2015**.
73. Short Term Course on Mechatronics, organized by Department of Electronics & Inst. Technology in collaboration with Academic Staff College, University of Kashmir and NIT, Srinagar at UoK, NIT and KGP, **Srinagar** from 21-26 June, **2011**.
74. National Seminar on Investment and potential of IT Sector in J&K State, organized by Department of Electronics & IT, University of Kashmir, Srinagar, India and Department of Science and Technology, Govt. of J&K, **Srinagar, India** on 15 Nov, **2006**.
75. National Seminar on Recent Trends in Nanotechnology, Department of Electronics & IT, University of Kashmir, **Srinagar, India** and Department of Science and Technology, Govt. of India, from 19-20 June, **2006**.
76. National Seminar on Digital Library Initiatives: Issues and Challenges, organized by Department of Library and Information Science, University of Kashmir, **Srinagar**, from 6-7 Nov, **2006**.
77. National seminar on Advances in Soft Computing, organized by Department of Electronics & Instrumentation Technology, University of Kashmir, **Srinagar, India** and Department of Science and Technology, Govt. of India on 7-8 Oct, **2005**.
78. National Seminar on Embedded Systems and Solutions, organized by Department of Electronics & Instrumentation Technology, University of Kashmir, **Srinagar, India** on 10 July, **2003**.

  
M. Tariq Bandy