BASANT KUMAR

Asst. Professor /Program Head (Information Security)

OBJECTIVE

To secure a challenging position where I can effectively contribute my skills and to involve in the development and launch of pioneering research and interdisciplinary programs for students. To be a season administrator with high commitment to implementing action plans, looking to utilize sound business and technical acumen, strategic thinking, and planning skills.

CONTACT

PHONE:
+968 99615731

WEBSITE:
https://www.mcbs.edu.om/en

Linkedin
https://www.linkedin.com/in/dr-basant-kumar-873756a7/detail/recent-activity/shares/

iD ORCID
https://orcid.org/0000-0002-9587-3642

Google Scholar
Basant Kumar - Google Scholar

EMAIL:
basant.info@gmail.com

HOBBIES

Music
Travelling
Reading
Writing
Cricket
Football

EDUCATION

➤**Post-Doctoral Fellow**
 Eudoxia Research University, USA (2022)

➤**Ph.D. - DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE (Cyber Security), BANASTHALI UNIVERSITY, India, 2013.**

➤ **Post Graduate Program in Blockchain Technology**
  Belhaven University, USA

➤**M.PHIL. MASTER OF PHILOSOPHY IN COMPUTER SCIENCE, MBU, India, 2011.**

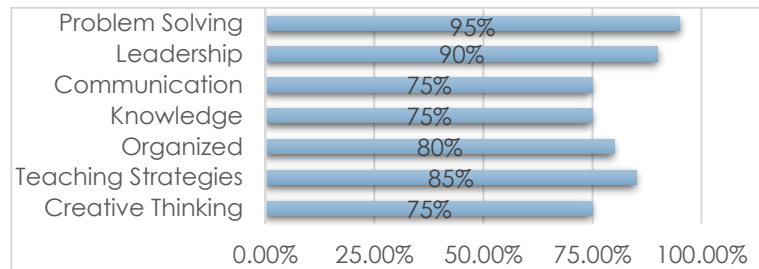➤**M.C.M. MASTER'S IN COMPUTER MANAGEMENT, UNIVERSITY OF PUNE India, 1996.**

➤**B.C. S, BACHELOR OF COMPUTER SCIENCE, JVBI UNIVERSITY RAJASTHAN, 1996.**

➤**B.A. BACHELOR OF ARTS, UNIVERSITY OF DELHI, 1994.**

CERTIFICATIONS

- ***Certification in Blockchain from IBM***

- ***Advanced Certification in Blockchain Technology from IIT Kanpur***

- Certification in **Blockchain Technology** from KERALA Blockchain Academy & Blockchain Council

- **Learning to Teach Online**, certification from **The University of New South Wales, Sydney** (20th June 2020)

- Certified Computer Hacking Forensic Investigator (**CHFI), EC Council**, Certificate No ECC6904857213, 10 January 2020

- Certified Ethical Hacker (**CEH**), **EC COUNCIL**,26th July 2018, Certificate No ECC47685393418

- **CompTIA Security+** Certified, CAREER ID: COMP001020715803,23 May 2014

- **ICDL Certificate**,11th June 2009, License No GCC 080 243403

- **SOA & JAVA developer**   Edureka, certificate id: C83CY7VY

- IELTS(G) British Council: L:6.5 R:6.5 W:7 S:7   Band Score:7

SKILLS

Skill	Percentage
Problem Solving	95%
Leadership	90%
Communication	75%
Knowledge	75%
Organized	80%
Teaching Strategies	85%
Creative Thinking	75%

0.00%   25.00%   50.00%   75.00%   100.00%

COMPUTER SKILLS

- Programming Languages: Borland C/Turbo C/Visual C++ using Visual Studio 2015, PHP on WAMP, Python, Java(NetBeans/Eclipse)
- Web Development: J2EE, Web Services, Core Java
- DBMS/RDBMS: Oracle DBA 11 g, Microsoft Access 2007, SQL Server 2017, My-SQL
- Web Technology: HTML, ASP.NET 4.5, VB.NET 4.5, JavaScript, Adobe Dreamweaver CS 4, CS 5.5
- Operating Systems: DOS, Red Hat Linux , Windows Xp, Windows 7, Windows8, Android
- Documentation: MS Word/Excel/PowerPoint/MS Project/MS Outlook/MS Publisher
- Network Administration & Security: Red Hat Linux,GNS3
- Router & Switch: Packet Tracer
- Cryptography: CrypTool, Python
- Compiler Design: JFLAP

INFORMATION SECURITY ANALYST SKILLS

- Information Security: Ethical Hacking, Pen Testing: Kali Linux, Malware Analysis
- Analyzing Security System Logs, Security Tools, and Data
- Creating, Modifying, and Updating Intrusion Detection Systems (IDS)
- Creating, Modifying, and Updating Security Information Event Management (SIEM)
- Evaluating and Deconstructing Malware Software
- Familiarity with Security Regulations and Standards
- Implement and Maintain Security Frameworks for Existing and New Systems
- Strong Technical Background in Data Loss Prevention
- Supporting and Managing Security Services
- Training Organization on Security Measures

PROFESSIONAL EXPERIENCE (23 Years)

Asst. Professor & Program Head   **Sep 2007 to Till Date**

Modern College of Business and Science (Under Ministry of Higher Education of Sultanate of Oman and affiliated with University of Missouri-St Louis, USA)

1.Conducted sessions, presentations and lectures for Associate Diploma in Information and communication Technology.
2.Deliver lectures effectively to Bachelor of Science in Computer Science Program.
3.Conduct lectures in specialized Cyber Security Courses of master's in information technology Program.
4.Coordinated the Master in Information Technology Program. Facilitated the processes of planning and implementation leading to the
• selection and registration of qualified students
• selection and engagement of qualified faculty
• maintenance /enhancement of the quality of content, method, and assessment

5. Develop systems, policies and procedures to ensure proper delivery of programs and services
6.Coordinated and documented the processes of monitoring and evaluation of the delivery of the Master Degree program, students' satisfaction, faculty performance leading to improvement
7. Attended other relevant matters which were assigned by the Director of Postgraduate Studies from time to time.
8. Actively participated in Research and successfully engaged students to carry research work.
9.Conducted numerous lab sessions for capstone project under the canopy of Industry and Academia.
10. Organized numerous workshops and seminars and conducted in house training programs for faculty and staff of the college to support faculty and staff development program.
11. Guided project students of Bachelor and Master Degree Program in Web Development and Cyber Security.
12. Actively engaged in teaching and learning resource committee
13. Responsible as a Program coordinator of Bachelor of Science in Information Security program
14. Accountable to advise students of Bachelor of Science in Information Security program
15. Mentored probation students to engage in creative and innovative learning to improve the GPA.
16. Organized information security awareness program for school students at regular intervals
17.Coordinate long-range planning activities for the technology infrastructure of the college, including administrative/student information systems, computer networks, personal computers, video systems, and voice communication systems.
18.Evaluate and recommends vendor contracts for hardware, software, and technology related services as needed.
19.Establishe standards for desktop computing, user support services and training.
20.Develop information security guidelines and manage implementation, arranges for needed training and staff professional development, and recommends and drafts policy revisions where indicated.

21.Coordinate the activities of institutional research and web services to support the college's information and communication needs.
22. Engaged students to Publish several research papers and articles in Scopus indexed journals

Sr. Computer Science Teacher   **August 2001 to Sept 2007**

Indian School Muscat, Sultanate of Oman

1. Responsible to work as an IT Coordinator, International Award Scheme Coordinator, Cyber Olympiad Coordinator and a House Master
2. Conducted In-house training for faculties in Web Designing
3.Presented quarterly digital teaching reports along with recommendations to senior management and Principal of Indian School Muscat
4. Taught C++, C, Web Designing and Visual Studio 3.5 Framework to 10+2 students as a CBSE course Curriculum
5. Received numerous recommendation letters from academicians of Indian School Muscat
6.Used Simulators and Power point presentations and Demonstrations of concepts by using open-source software and videos, Mini Projects and exercises for course reinforcement.
7.Moodle e-learning System used for course teaching, learning and evaluation.
8.Used Flipped classroom methodology

Sr. Faculty   **June 1996 to February 2000**

Adventist College, Surat (India)

- Curriculum Development
- Subjects handled with available feedback scores.
- Updated the syllabus each year to include the latest research and Technology.
- Applied relevant tools and packages in classroom

    - HTML Editing Tools: Macromedia Dreamweaver, Microsoft FrontPage.
      Graphics Tools: Flash, Adobe Photoshop, Adobe PageMaker, Adobe Illustrator, InDesign.

    - Office Package: Microsoft Word, Microsoft Excel, Microsoft Access, Microsoft PowerPoint, Microsoft Outlook Express

    - Languages : Visual basic, C, C++, java, LOGO, Q-Basic, ASP, SQL server, .NET,C#.

ACADEMIC HONORS & AWARDS

2022   **Recipient of International Academic Excellence Award**
            By Western Sydney University, Australia, Elsevier's
            Mendeley http://www.i2or.com/

2018   Best academician of the year 2018 award by GECL
            https://geclawards.com/gecl-2018/img_3736/
            https://geclawards.com/wp-
            content/uploads/2019/04/IMG_3738.jpg

2017-Present OMAN CERT Professional Ambassador
https://ambassadors.cert.gov.om/Professionals_en.aspx

2015   *As a **Subject Matter Expert** (SME) for the CompTIA, Washington, D.C.(USA)*
https://certification.comptia.org/get-involved/become-a-subject-matter-expert/current-examplify-smes

2001-2007   Certificate of Appreciation for Service as a Cyber Olympiad Coordinator of Middle East Region.

2007-Present Appreciation letter for Magnificent Contribution in Academic Excellence at MCBS

2001-2006   Appreciation letters from different departments of Indian School Muscat

2001-2003   Awarded Certificate for Displaying Bio Diesel Project Model in the National Level Jawaharlal Nehru Science Expo, Dehradun, India

1989-91   Indian Council of Agril. Research Nominee

THOUGHT LEADERSHIP

2024-Present   Sr IEEE Member

2022-Present   Chair, Departmental Research Task Force Committee at Modern College of Business & Sc

2019-Present   Teaching Learning Development and Resource Committee member at Modern College of Business & Sc(MCBS)

2019-Aug 2020   Research Ethics Review Committee member at Modern College of Business & Sc (MCBS)

2018-Present   IEEE Student Branch Chair at MCBS

2016-Present   Program Coordinator of Master in Information Technology(MIT) at MCBS

2017-Present   ISACA Student Branch Chair at MCBS

2015-Present   Program Coordinator of Information Security Program at MCBS

2013-2018	Board of Examiner for a PhD Thesis "Catastrophic risk assessment using integrated multicriteria Flood Vulnerability Index(FVI) for various Spatial and Temporal mining scales: North Bihar ,India Bharathiar University, Coimbatore University, Tamilnadu India
2016-2017	Chairperson of Library at Modern College of Business & Sc, Sultanate of Oman
2011-Present	External Reviewer of Oman Dental College for IT Program
2011-Present	External Project Guide of IGNOU Muscat Chapter for Master in Computer Application
2001-2007	Certificate of Appreciation for Service as a Cyber Olympiad Coordinator of Middle East Region.
2007-Present	Student Advisor for BSCS, BSIS and Associate Diploma in Information Technology Programs

WORKSHOP/ SEMINAR/CONFERENCE PRESENTATION

- *A paper entitled "Utilizing Packet Tracer Simulation to Modern Smart Campus Initiatives for a Sustainable Future" has been accepted for 2024 IEEE the 12th International Conference on Smart Energy Grid Engineering (SEGE 18-20 August 2024), which will be held in Oshawa, Canada and will be included into IEEE Xplore and submitted to EI Compendex, Scopus and other major databases for abstracting and indexing (A&I).*

- *A manuscript "Developing an Advanced Cybersecurity Framework and Blueprint: A Contemporary Approach to Counter Hacking through Reverse Engineering Techniques has been accepted for "International Conference on Smart Cyber Physical Systems (ICSCPS-Sept 13-14,2024),CHRIST University India and will be published in conference proceedings by Springer 'Smart Innovation,Systems and Technologies' ISSN: 2190-3018, Book Series. ISSN: 2190-3018 Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. All books published in the series are submitted for consideration in the Web of Science.*

- *A manuscript "Design of Heart Rate Monitoring System Using Visual Simulation Tool" has been accepted for "International Conference on Smart Cyber Physical Systems (ICSCPS-Sept 13-14,2024),CHRIST University India and will be published in conference proceedings by Springer 'Smart Innovation,Systems and Technologies' ISSN: 2190-3018, Book Series. ISSN: 2190-3018 Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. All books published in the series are submitted for consideration in the Web of Science.*

- *A manuscript "Blockchain Technology in Higher Education: Opportuni1ties, Applications, and Network Security Challenge" has been accepted for "International Conference on Smart Cyber Physical Systems (ICSCPS-Sept 13-14,2024),CHRIST University India and will be published in conference proceedings by Springer 'Smart Innovation,Systems and Technologies' ISSN: 2190-3018, Book Series. ISSN: 2190-3018 Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago. All books published in the series are submitted for consideration in the Web of Science.*

- *A research paper entitled "Design and Execution of Secure Smart Home Environments on Visual Simulation Tool" was presented in an International Conference on Innovation in information technology and business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.*

- *A research paper entitled " Blockchain in the Education Sector – A Real-time Application in the Computer Science Department at MCBS Oman" was presented in an International Conference on Innovation in information technology and business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.*

- *A research paper entitled " Healthcare Information Exchange Using Blockchain and Machine Learning was presented in an International Conference on Innovation in information technology and business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.*

- *A research paper entitled " IoT-Enabled Smart Cities: A Review of Security Frameworks, Privacy, Risks and Key Technologies " was presented in an International Conference on Innovation in information technology and business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.*

- *A research paper entitled " The Use of Machine Learning in Digital Forensics " was presented in an International Conference on Innovation in information technology and*

business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.

- *A research paper entitled " Securing quantum communications I" was presented in an International Conference on Innovation in information technology and business (ICIITB)(Springer Nature) on November 9th and 10th, 2022 at MCBS, Oman.*

- *A research paper entitled " Blockchain in Securing the Data Integrity of College" was presented in an International Conference on Innovation in Information Technology and Business on 9th November 2022 at Modern College of Business and Science (MCBS), Sultanate of Oman*

- *Conducted a workshop on "Does Remote Work Present a Major Cybersecurity Threat?" on 7th July 2022 at MCBS.*

- *Conducted a workshop on "Lecture Capture " on 23rd June 2022 at MCBS.*

- *Organized a workshop on "Blockchain" under the guidance of IEEE Information Security Student Chapter*
Date: 2nd February at 10 am(Muscat) 4 :00 pm (AEST) Mode: Live Webinar
Resource Person:Dr Naveen Chilamkurti is currently a SMIEEE Professor and Head of Cybersecurity Discipline Director, La Trobe Cybersecurity Research Hub La Trobe University, Melbourne, Australia.

- *Organized a workshop on "Next Generation Skill" under the guidance of IEEE Information Security Student Chapter*
Date: 16th February: LIVE WEBINAR at 10 am (GST)
Resource Person: Mr Ashok Pandey

- *Organized a workshop on " Virtual World: It's not a game, it's your life stay safe! " under the guidance of IEEE Information Security Student Chapter*
Date: 23rd February: LIVE WEBINAR at 10 am (GST)
Resource Person: Dr Rakshit Tandon

- *Delivered an expert talk on "Blended Learning: A synthesis of best Practices" in "Indo-Muscat One-week Virtual Workshop on Research Writing skills-Workshop series-01" from 25th May 2020 to 29thMay 2020*
(https://www.youtube.com/watch?v=3ofOGi0XIzM) with the collaboration of University Centre of Research and Development, Galgotias University-India.

- *Gave a presentation on Avenir 2019 – 'be future ready', a comprehensive project, designed and aimed at effectively guiding students and parents to chart out the future course of action after school education, was inaugurated at Indian School Seeb on October 10 ,2019 in the presence of a host of dignitaries, parents, teachers and students across Indian Schools in Oman. Addressed students about Information Security: A Paradigm shift in Higher Education*
https://www.linkedin.com/in/dr-basant-kumar-873756a7/detail/recent-activity/shares/

- *Conducted a FOSS workshop on 27TH February 2015 at MCBS.*

- *Conducted a workshop on the fundamental concepts and best practices related to authentication, authorization, and access control (24th April 2014) at MCBS*
- *"Networking" workshop was organized on 17th Feb, 2013 at MCBS.*
- *Organized a workshop on " The Road User and Safety" on 26th March 2013 at MCBS*
- *Organized a workshop on "Dare to Dream" on 22nd April 2013 for all foundation level students as a career guidance workshop.*
- *Conducted a workshop for MCBS teaching staff members to give an emphatic presentation using Prezi Summer 1 2013*
- *Conducted a workshop on UML for graduating students during Fall 2013*
- *Organized a Global Entrepreneurship Week (GEW) w.e.f Nov. 18-24,2013 in MCBS*
- *Organized an Hour of Code workshop w.e.f 8-15th Dec 2013 at MCBS.*
- *Conducted a workshop on UML (13th March 2014).Venue: MCBS*
- *One - 4 Days Workshop at MCBS on Database Connection ,Fall 2010*
- *One – 3 Days In house Training to ESL Department of MCBS on Microsoft Office 2007 ,Spring 2010*
- *One - 1 Day Workshop at MCBS on Networking Fundamentals, Fall 2011*
- *One – 1 Day Interactive Workshop at MCBS on Mobile Computing, Summer 1 2012.*
- *One-1 Day Interactive Workshop at MCBS on "Facebook", Spring 2012*
- *Coordinated a workshop on "Challenges & opportunities in IT career" on 1st Dec, 2012 at MCBS.*
- *Organized a workshop on "Leadership and Management" on 15th Dec, 2012 at MCBS.*
- *Organized a workshop on "3d Designer and Visualizer " on 26th Nov,2012 at MCBS "Database security - risks and control methods" ,presented in IEEE International*
- *Conference on Computer Communication and the Internet (ICCCI 2016) Oct. 13- 15, 2016 | Wuhan, China. www.iccci.org*
- *Major Field Test: An Assessment Tool Used For Program Learning Outcome*
- *Measurement. Journal of Computations & Modelling, vol.5, no.4, 2015, 97-104 ISSN: 1792-7625 (print), 1792-8850 (online) Scienpress Ltd, 2015*
- *CatchMe: Smartphone based Intelligent Black Emergency Alert Technology (IBEAT) System, Proceedings of "The 2nd International Conference on Applied Information and Communications Technology" - ICAICT 2014, Middle East College of Information Technology, Oman.*
- *Mobile Comprehensive Emergency Support System (MCESS) for Hospitals in Smartphones ,2nd INTERNATIONAL CONFERENCE On "Advancements in Computing Sciences, Information Techniques & Emerging E-Learning Technologies" (ACSITEET–2014) Organized by "Krishi Sanskriti" On 22nd-23rd February, 2014, Jawaharlal Nehru University, India*
- *Paper presented on "Emerging Paradigms and Practice in Information and Communication Technology and*

Management" in an International Conference from 26-28 July 2012 at GBU, India under supervision of University of Maryland Eastern Shore and FrostBurg State University USA.

- *Paper presented on ICT ("Web based Program Assessment and Documentation") in an International Conference on 22-23rd March 2011, organized by Middle East College of Information Technology, Sultanate of Oman.*

- *Participated in International Symposium on Artificial Intelligence (2012) at Al Musanna College of Technology*

- *Attended workshop on "Advising" by Dr. Joseph Mani at MCBS(2012)*

- *Symposia, Conferences, Research Meetings and Presentations*

- *Participated in a symposium on "Innovating Oman" on 14th Feb 2012 at Hayat Regency Sultanate of Oman*

- *Attended a workshop on "Cloud Computing" at Al Bustan Palace, Oman organized by Microsoft on 27th Feb 2012.*

- *Coordinated Library Week at MCBS with effect from 25-28 Feb 2012 Imagine Cup" by Microsoft was introduced under my supervision on 28th Feb 2012 at Seminar Room.*

- *Attended a Lecture on "Changing conditions for Science, Technology, and Innovation: Hurdles and Opportunities" presented by Prof. Charles Wessner on Sat 10th March 2012 at Grand Hayatt Muscat in accordance with Research Council, Oman.*

- *Attended "Knowledge sharing & best practices" workshop at MCBS on 22nd Feb 2012.*

- *Participated in "IS Project Issues" by Dr Bhasi at MCBS(2012)*

- *Attended a Guest Lecture on "Information Security" at MCBS(2011)*

- *Attended workshop on "Advising" by Dr Joseph Mani at MCBS (2011)*

- *Attended a workshop on "challenges in Education " by Dr. Ahmed Al- naamany(2012)*

- *Attended WebCT User's conference on E-learning Technologies on Sept 6-7 2004 in ISM, MUSCAT*

- *Participated International Conference on Higher Education & Emerging Trends in Information Technology on 29-30 March 2005 in Mazoon College, Oman.*

- *Attended training program on "E-Learning", organized by Webtek India (P) Ltd (IBM Rational Channel Partner), between 9-11th of July 2005, at Banasthali Vidyapith, Rajasthan*

- *Attended In House training program on "Windows Vista & Networking", organized by Bahwan Cybertech LLC(A leading IT Firm of Middle East)*

- *Attended Annual conference of CERT on 30th Dec 2012 at Al Bustan Palace.*

- *Attended an "Open Source Software Conference" on 19th Feb 2013 at SQU.*

- *Attended a seminar on "Microsoft Open Door" on 24th Feb, 2013 at Al Bustan Palace.*

- *Attended e- conference on "Cyber-Resilience: the Core of Modern Risk Management" on 17th April 2013.*

- *Attended in Security Summit , sponsored by Information Technology Authority, Oman*

Publications in Journal and Conference Proceedings

https://orcid.org/0000-0002-9587-3642

1. A research paper entitled "**Blockchain-based authentication model for education data storage**" has been accepted by Inderscience Publishers: IJISE-195092 for publication in for publication in Int. J. of Industrial and Systems Engineering (Q3 Scopus Journal)

2. **Basant Kumar**, Hothefa Shaker, Beylasan Al Ruzaiqi , Ruqaiya Al Balushi, Design and Implementation of a Smart Office Network Module Using Visual Simulation Tool, Journal of Namibian Studies, 34 S2 (2023): 2664-2676 ISSN: 2197-5523 (online) https://doi.org/10.59670/jns.v34i.3634

3. **Basant Kumar**, IoT Based Smart Greenhouse Monitoring System using Visual Simulation Tool, pp 44-58, Volume 31 No. 2, 2023,International Journal of Science, Mathematics and Technology Learning,ISSN: 2327-7971 (Print) ISSN: 2327-915X (Online) https://www.thelearner-ijsmtl-cgrn.org/cgrn/issue-details.php?pid=280 https://doi.org/10.5281/zenodo.8158958

4. Kamla Al Aufi, **Basant Kumar**, Security Testing of Android Application using Drozer, International conference on computational sciences and sustainable technologies.Springer CCIS (Scopus Indexed) https://link.springer.com/chapter/10.1007/978-3-031-50993-3_8 DOI:10.1007/978-3-031-50993-3_8

5. P. Vijaya, Rajeev Rajendran, **Basant Kumar**, Joseph Mani, Early prediction of at-risk Students in higher education institutions using Adaptive Dwarf Mongoose Optimization Enabled Deep Learning, International conference on computational sciences and sustainable technologies. Springer CCIS (Scopus Indexed) https://link.springer.com/chapter/10.1007/978-3-031-50993-3_2, pp.15-29 DOI: https://doi.org/10.1007/978-3-031-50993-3_2

6. **Basant Kumar**, Istafa Al-Busaidi, Maram Halloush, Healthcare Information Exchange Using Blockchain and Machine Learning, pp 141-155, Volume 104, Advances in Computer Science Research, Proceeding of the 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022),(Springer Publications), Muscat Oman, ISSN 2352-538X ISBN 978-94-6463-110-4 DOI 10.2991/978-94-6463- 110-4_6 Springer Nature: https://www.atlantis-press.com/proceedings/iciitb-22/125984183

7. Yusra Al Balushi1,Hothefa Shaker, **Basant Kumar**, The Use of Machine Learning in Digital Forensics: Review Paper, pp 182-199,Volume 104, Advances in Computer Science Research, Proceeding of the 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022),(Springer Publications), Muscat Oman, ISSN 2352-538X ISBN 978-94-6463-110-4
DOI 10.2991/978-94-6463-110-4_9
Springer Nature: https://www.atlantis-press.com/proceedings/iciitb-22/125984186

8. **Basant Kumar**, Hothefa Shaker, Josephmani, Design and Execution of Secure Smart Home Environments on Visual Simulation Tool, pp 200-218,Volume 104, Advances in Computer Science Research, Proceeding of the 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022), (Springer Publications), Muscat Oman, ISSN 2352-538X
ISBN 10.2991/978-94-6463-110-4_19
DOI 10.2991/978-94-6463-110-4_19

   https://www.atlantis-press.com/proceedings/iciitb-22/125984187

9. Bushra Al Barwani, Esraa Al Maani, **Basant Kumar**, IoT-Enabled Smart Cities: A Review of Security Frameworks, Privacy, Risks and Key Technologies, pp 169-181,Volume 104, Advances in Computer Science Research, Proceeding of the 1st International Conference on Innovation in Information Technology and Business (ICIITB 2022), (Springer Publications), Muscat Oman, ISSN 2352-538X
ISBN 10.2991/978-94-6463-110-4_8
DO10.2991/978-94-6463-110-4_8,
Springer Nature: https://www.atlantis-press.com/proceedings/iciitb-22/125984185

10. Sheikh Zain bin Hasan, Danish Raza,**Basant Kumar**
EMERGING iot SOLUTIONS: DEVELOPING A TEMPERATURE MONITORING SYSTEM
Peer Reviewed Open Access Journal
International Journal of Advanced Research in Management, Architecture, Technology and Engineering (IJARMATE) Vol. 9, Issue 8, August 2023
ISSN (ONLINE): 2454-9762 ISSN (PRINT): 2454-9762
Available online at www.ijarmate.com
DOI: 10.20256/IJARMATE.2023.0908002
IJARMATE.COM

11. Yusra Al Balushi; Hothefa Shaker; **Basant Kumar**, The Use of Machine Learning in Digital Forensics: Review Paper
DOI 10.2991/978-94-6463-110-4_9
Volume 104   ISSN 2352-538X ISBN 978-94-6463-110-4
Springer Nature: https://www.atlantis-press.com/proceedings/iciitb-22/125984186

12. **Basant Kumar**; Shatha Rashad Alraisi", Deepfakes Audio Detection Techniques Using Deep Convolutional Neural Network"
https://ieeexplore.ieee.org/xpl/conhome/9850394/proceeding
INSPEC Accession Number: 21970794
DOI: 10.1109/COM-IT-CON54601.2022.9850771

13. **Basant Kumar**; Omar Al Falhi "Digital Transformation through APIs"
https://ieeexplore.ieee.org/xpl/conhome/9850394/proceeding
INSPEC Accession Number: 21970887
DOI: 10.1109/COM-IT-CON54601.2022.9850728

14. **Basant Kumar**; Marwa AbuAlhaija; Lubna Alqasmi; Maha Dhakhri "Smart Cities: A New Age of Digital Insecurity"

2020 9th International Conference System Modeling and Advancement in Research Trends (SMART)
2020-12-04 | Conference paper
DOI: 10.1109/smart50582.2020.9337127

15. Mazoon Al Rubaiei; Thuraiya Al Yarubi; Maiya Al Saadi; **Basant Kumar**,"SQLIA Detection and Prevention Techniques"

2020 9th International Conference System Modeling and Advancement in Research Trends (SMART)
2020-12-04 | Conference paper
DOI: 10.1109/smart50582.2020.9336795
Copyright © IEEE–2020 ISBN: 978-1-7281-8906-2
https://ieeexplore.ieee.org/xpl/conhome/9336789/proceeding

16. Mazoon AlRoubiei; Thuraiya AlYarubi; **Basant Kumar**
Critical Analysis of Cryptographic Algorithms
(ISDFS)2020-06 | Conference paper
DOI: 10.1109/isdfs49300.2020.9116213
https://ieeexplore.ieee.org/xpl/conhome/9336789/proceeding

17. Aljaafari Hamza, **Basant Kumar**, A Review Paper on DES, AES, RSA Encryption Standards
DOI: 10.1109/SMART50582.2020.9336800
IEEE Xplore
2020 9th International Conference System Modeling and Advancement in Research Trends (SMART)

18. Samya Al Busafi, **Basant Kumar**, Review and Analysis of Cryptography Techniques
DOI: 10.1109/SMART50582.2020.9336792
2020 9th International Conference System Modeling and Advancement in Research Trends (SMART)

17. Maiya Al Saadi, **Basant Kumar,**
A Study of Image Encryption / Decryption by Using Elliptic Curve Cryptography "ECC".International Journal of Future Generation Communication and Networking Vol.13, No. 3, (2020), pp. 1148–1157 ISSN: 2233-7857. Available from URL:
http://sersc.org/journals/index.php/IJFGCN/article/view/26929/14687

19. HS AlDerai, **Basant Kumar**,A Study of Image Encryption/Decryption by Using Elliptic Curve Cryptography ECC
International Journal of Future Generation Communication and Networking Vol.13, No. 3, (2020), pp. 1148–1157 ISSN: 2233-7857. Available from URL:
http://sersc.org/journals/index.php/IJFGCN/article/view/26929/14687

19. HH AL-Abri, **B Kumar**, J Mani,Improving Fraud Detection Mechanism in Financial banking Sectors Using Data Mining Techniques. 5th International Conference on Advanced Computing and Intelligent Engineering,Université des Mascareignes (UdM), Mauritius 25-27 June, 2020
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DOI:10.1007/978-981-33-4299-6_70

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EXPERIENCE IN CONFERENCE COMMITTEE

Technical Committee Member
5th International Conference on Electronics and Sustainable Communication Systems (ICESC 2024)"
Conference URL: http://icescs.com/

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https://www.iccsst.com/

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International Conference on Computational Sciences and Sustainable Technologies (ICCSST-2023) HELD ON 8-9 May 2023,Deptt of Comp Sc, Christ University, Bangalore
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Reviewer
International Conference on Computational Sciences and Sustainable Technologies (ICCSST-2023) HELD ON 8-9 May 2023,Deptt of Comp Sc, Christ University, Bangalore
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Program Committee Member
3rd World Conference on February 07-08, 2024 | Dubai, United Arab Emirates Engineering, Technology and Applied Science
https://eurasiaconferences.com/events/dubai/2024/engineering-technology-and-applied-science/committee

Technical program committee
(TPC) of ICESC 2022
3rd International conference on Electronics and Sustainable Communication Systems ICESC 2022

Technical program committee
ICESC - 2024 (icescs.com)

Technical committee member
third International Conference on Artificial Intelligence and Smart Systems (ICAIS 2023).
Conference URL: http://icaise.in/2023/

Advisory Committee Member
www.krishisanskriti.org

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INSTITUTIONAL RESEARCH

- Mathematical Model to Predict at Risk Students using Hybrid optimized Deep Q network (2020)
- Exploring the Integration of Blockchain based Digital Technology for a Smart Educational Framework at Modern College of Business and Science: A Systematic Review (2022)
- Development of an ICT Tool for automating ABET Assessment Processes
- Application of Data Analytics to understand the dynamics of student's dropout
- Investigation and analysis of students' performance at the Modern College of Business and Science

RESEARCH GRANT

- Submitted the proposal "Advancements in Cardiovascular Disease Prediction and Risk Management: Integrating Data Analytics and Clinical Insights" for Research Grant to The Research Council of Oman on 31st March 2024

- Working as Principal Co Investigator for Fractional White Smell Agent Optimization trained Transfer Learning for Melanoma Classification for Research Grant of The Research Council of Oman

- Vehi-Trak - A Smart and Secure Blockchain System to Track Vehicle History in Sultanate of Oman
  project successfully submitted to The Research Council of Oman in 2023.

- Engaged in Development of Algorithmic and Combinatorial Aspects of Algebras used in Mathematical Physics

RESEARCH PROJECT GUIDANCE

SQU, Oman

Ph.D. – INFORMATION SECURITY – BLUE PRINT FOR HACKING
COUNTERMEASURE FRAMEWORK, 2013

Binary University Malaysia

Ph.D. – INFORMATION SECURITY- Cyber-attacks : Challenges faced by state owned companies, 2018

Birla Institute of Technology & Science – Waljat College of Applied Science – Muscat, Oman

MASTER OF SCIENCE IN SOFTWARE SYSTESMS – DATA MINING, 2007

Mazoon College ,Sultanate of Oman

M. *Tech (*COMPUTER SCIENCE) SECURE ONLINE BANKING, 2012

IGNOU – Muscat, Oman

FINAL YEAR PROJECT – MASTER IN COMPUTER APPLICATION – MCA, 2013 to Present

MCBS-Muscat, Oman

FINAL YEAR CAPSTONE PROJECT – TAWASUL (COMMUNICATION BETWEEN DEAF AND DUMB)

MASTER OF INFORMATION TECHNOLOGY

- EFFECTIVE APPROACH TOWARDS INTRUSION DETECTION & PRETENTION SYSTEMS IN IMPLEMENTING DÉFENSE IN DEPTH : NOVEMBER 2017

- DESIGN & DEVELOPMENT OF A MOBILE APPLICATION FOR CLINICAL DECISION MAKING IN COMPLIANCE WITH SECURITY REQUIRMENTS REQUIRED BY OMAN HEALTHCARE INDUSTRY : SEPTEMBER 2019

- IMPORTANCE OF BUILDING A SECURITY OPERATIONS CENTER (SOC):JULY 2020

- ANALYTICAL STUDY ON THE FUTURE OF CYBER SECURITY MARKET IN OMAN :JULY 2020

- IMPROVING FRAUD DETECTION MECHANISM IN FINANCIAL BANKING SECTORS USING DATA MINING TECHNIQUES: JULY 2020

- FIREWALLS: ENFORCEMENT OF SECURITY IN NETWORKS :FEBRUARY 2021

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5. ANANTHAN R, CYBER ATTACK PREDICTION USING VULNERABILITY ASSESSMENT (2016-17).

6. DEVI V S, PATTERN MATCHING BASED DYNAMIC MALWARE DETECTION USING AHO-CORASICK ALGORITHM (2015- 16).

7. GIBIN GEORGE, ANDROID MALWARE DETECTION USING CLASSIFIER FUSION METHOD (2015-16).

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10. REVERSIBLE DATA HIDING IN ENCRYPTED IMAGES, ROSHNI (2014-15), INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

11. MECHANISMS FOR ANTIPHISHING,, ROOPAK S(2013-14), INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

12. FINGER VEIN BASED BIOMETRICS, ARYA (2013-14), INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

13. JOINT FINGERPRINT DECRYPTION MECHANISM FOR MEDIA, SREEDEVI KOVILAKATH (2013-2014), INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

14. PROXY RE-ENCRYPTION IN SYMMETRIC-KEY CRYPTOGRAPHY, HITHA (2013-14) INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

15. REMOVABLE WATERMARKING FOR IMAGES,, SHAJEELA BEEGAM (2013-14), INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT – KERALA, COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY.

PATENTS

- Applied for Australian patent for "Fog computing based blockchain for diabetic heart disease prediction system using hybrid ensemble classifier". Submitted on 31st March 2024

- Applied for Australian Patent for "Leveraging Explainable AI in Emergency Medical Services for Advanced and Secured Smart

Ambulance communication using 5G to reduce the response times and to improve patient outcomes in Oman." Submitted on 15st March 2024

- Dr Basant Kumar, Alwaleed Saleh Ali Al Abri , Abdulbasit Khalid Al Balushi "Project X Linux", USPTO 102014-00551, Omani Patent. Submitted: 07/2023

- "Systems & Methods for Battle Field Identification using 3FA on Smart Phones", USPTO, waiting for document number. Submitted: 06/2023

- Under Review "Prototype Design of Smart Home System using Simulator " USPTO, waiting for document number. Submitted: 07/2022

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2011-Present	External Reviewer of Oman Dental College for IT Program
2011-Present	External Project Guide of IGNOU Muscat Chapter for Master in Computer Application
2001-2007	Certificate of Appreciation for Service as a Cyber Olympiad Coordinator of Middle East Region
2015-Present	Editor in Chief, International Editorial Board of IJESR, http://www.ijmra.us/editor_ijesr.php
2015	Committee member of Inter Collegiate Career Fair(ICCF 2015), Sultanate of Oman
2015-Present	Advisory Committee Member, www.krishisanskriti.org

REVIEWVER OF JOURNALS AND CONFERENCES

1. Reviewer of Review of Control Theory and Informatics, PAK Publishing Group, http://www.pakinsight.com/
2. Reviewer of American Research Journal of Computer Science and Information Technology.
3. Reviewer of International Journal of Enhanced Research in Science Technology & Engineering (IJERSTE), ISSN No: 2319 -7463

4. Reviewer of International Journal of Enhanced Research in Management & Computer Applications (IJERMCA), ISSN No: 2319-7471
5. External Reviewer of International Journal of Management, IT and Engineering (ISSN 2249-0558)
6. External Reviewer of Scientific & Academic Publishing Co. ,Address: 1200 Rosemead Blvd, STE D #105, Rosemead, CA, 91731, USA ,E-mail: editor@sapub.org

PROFESSIONAL MEMBERSHIPS

Member (Since 2016)
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Academic Initiative Member (Since 2014)
International Business Machines Corporation (IBM) - USA

Member (Since 2015) American Association of Science of Science & Technology (AASCIT) – USA

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