Dr. Dinesh Kumar Saini

Associate Professor and Coordinator Business Information Technology(BIT) Program
Faculty of Computing, Information Technology, Sohar University, Sultanate of Oman
Research gate RG Score- 28.45 and Google Citation Counts-698, H-index-11, i10-index-17, IEEE Member No: 94849513
Research Gate Link: https://www.researchgate.net/profile/Dinesh_Saini2/reputation
Google Scholar Link: https://scholar.google.com/citations?user=fENsBrAAAAAJ&hl=en
DBLP Link: https://dblp.uni-trier.de/pers/hd/s/Saini:Dinesh_Kumar
Indian Passport # M8971490, **Contact**: GSM +96891198574 **E-mail:** dinesh@soharuni.edu.om, dkssohar@gmail.com

Experience:	18 years' experience in undergraduate and postgraduate teaching
Area of expertise:	Computer Science and Engineering, Information Technology, Software Systems, Business Administration and Human Resource Management.
Career Objectives:	Seeking a faculty administrative position to utilize my skills in Institutes of Advance Learning offering professional growth while being resourceful, innovative and flexible
Personal Skills:	Problem solving abilities, excellent verbal and written communication skills, ability to deal with people, teaching expertise and team worker

EDUCATION

Ph.D. (Software Systems) Computer Science and Information Technology	**Birla Institute of Technology and Science, Pilani, Rajasthan India. Year – 2001-2006**. (5 Years) _The title of thesis_: **"**_An Analytical Study of Software Metrics and Models in the Software Development Environment for improving its quality."_
M.E. (Software Systems) Computer Science and Information Technology	**Birla Institute of Technology and Science, Pilani**, **Rajasthan India. Year 1997-1999.** (2 Years) With CGPA 8 out of 10.
M.Sc.(Technology)4Year Integrated.	**Birla Institute of Technology and Science, Pilani**, **Rajasthan India. Year 1993-1997.** (4 Years Integrated) With CGPA 6.6 out of 10.
Intermediate and High School	**Birla Higher Secondary School Pilani Rajasthan Year 1993.**

WORK EXPERIENCE

- **Acting dean, FCIT since sept 2016, till Feb.2018 and Program Coordinator for BIT from last 9 years.** Administrative Experience: University Senate Member, University Research Council Member, University Library Committee Member, Faculty Research coordinator, etc. Seminars, Conferences, Management and Executive Development Programme: Have conceived, planned, developed organized and implemented a number of Seminars, Conferences, MDPs, EDPs and FDPs
- Associate Professor Computer Science & Information Technology, Sohar University, Sultanate of Oman and Adjunct Associate Professor & Research Fellow, University of Queensland, Australia **(Sept.2008 – Continuing)**
- Assistant Professor Computer Science and Information Technology, King Saud University, Kingdom of Saudi Arabia **(July 2007 to Sept. 2008)**
- Worked as Lecturer and Assistant Professor, Computer Science & Information Systems Group in Birla Institute of Technology and Science, Pilani, Rajasthan India (Deemed University) since August 2000 to July 2007. (7 Years) Taught various program like M.E, M.B.A, M.Sc. (Hons.) and B.E (Hons.).
- Supervising research scholars for the award of the degree of Ph.D. in computer science and information technology, Business and Management in Indian and foreign universities in the areas of Cyber Defense, Mathematical Modeling, and Content Management Systems for e-education, Educational Management, Educational Finance, Technology Management.

- Participated in Research projects (Funded by TRC), "E Smart System for Industrial Air Pollution Monitoring, Prediction and Management Framework funded by Research council of Oman.
- Research studies in the areas of Software Engineering, Cyber Defense and Mathematical Modeling, e-Education, Educational Finance, Policy, Planning and Management of Educational Institution, Policy Research, Program Evaluation, Impact Analysis, Institutional Evaluation, Educational Management, Content Management Systems,
- Publications: 135 research Papers and numerous articles and book reviews in refereed and impact-factor journals and various International and National Conference of repute.
- Consultancy: Academic and Administrative Audit of institutions of Higher Education, Cost Savings and Resource use efficiency in the institutions of higher learning. Total Quality Management in the Institutions of Higher Education, Project planning & Development and Feasibility Analysis for Institutions of Higher Education.
- Dinesh saini, ORCID ID , orcid.org/0000-0002-5140-1731.

Administrative Experience:

Working as acting dean since 2016, Successfully updated whole faculty curriculum for all four steams and followed the quality process in curriculum update.
Developed and generated documents for Programs International Accreditation: FCIT programs are having accredited with ACS, OAAA institutional audit as well.
Resolving employability improvement issues of our Graduates: Initiated the program review for Student's employability and learning experience improvement. Faculty of computing and Information technology should grow in strength and numbers for that I will put my efforts.
Improved Working Environment of the Faculty: I believe in team working, congeniality and respect for my colleagues and my students. I have a very ambitious plan for my faculty. I initiated and the work is in progress for a new Master's program in Geographical Information Systems Environmental Informatics which is very much needed in this country. We have already proposed a new Master's program in Creative Technologies, the initial work and preparation are done at our faculty level. My plan is to boost research and services at our faculty, planning to revive both funding from external sources like in past we brought a big environment project to the university through FCIT. I have a plan to revive all international certificates for students like SAP, CISCO, ORACLE, ADOBE and PMP. Student's employability and learning experience will be my top priority.

Contributed to SU Strategic and Operational Planning: I actively participated in university strategic planning for meeting university vision and mission with academic values, and will continue to improve it. I will start the Ph.D. program in the faculty, we have six master faculty members, we will start our research degree with our internal staff as well as we can attract Ph.D. students from other institutions. FCIT will participate in the process of economic diversification; we will actively patriciate in "TANFEETH", in giving training and development. I will enforce faculty to follow Sohar University Curriculum Design Framework in which learning is a top priority, and then stimulate and nurture the students' development, giving help in terms of knowledge, techniques, and encouragement.

Enriched Teaching and Learning Improvement in the Faculty: My goals in teaching process improvement are not just to promote learning of the subject matter; I will promote the students learning to think logically, learn problem-solving methods and techniques, and improve writing skills.

Consolidated and Improved Student Retention Rate: Students will be monitored regular and students at risk will be given regular attention by arranging extra academic support activities in the faculty. I will get the list of students after early assessments formative or summative and this gives a signal to students who are not doing the work, or for whom the course material is too difficult so that they can either drop the course or make the decision to devote more time and effort to the course. Second, it gives students a good idea of where they stand in the course so that there are no surprises at the end. And finally, it allows me to take other factors into account when I make up final grades, resulting in increases for some students at the end of the course. I spend quite a lot of time in the process of figuring and deliberating final grades. As a result, I very rarely have any student who thinks that his or her final grade is unfair or unexpected.
Reorganized Feedback issues: I will try to improve communication and feedback both to and from students and faculty. I will encourage a 24x7 system of feedback, if there is any issue related to academics, services will try to solve immediately.
Prioritized Student Advising and teacher Availability: I will improve the systems office hours per week per course and I make the teacher available at other times as well, the detailed schedule of the teachers must be posted on my Web homepage as well as on notice boards or door of the teacher and Students advising will be made more efficient.

Streamlined Teaching Methods at Faculty: Class sessions - lecture and discussion will be monitored closely for all courses, as well as tutorials. Labs will be delivered with latest updated software. In will make sure that SULMS and TURNIT IN is used efficiently.

Incorporated Final Year Capstone project and Cooperative learning: More cooperative learning techniques will be incorporated into final year capstone projects. These techniques usually involve working in pairs or groups of three on a short problem, with specific instructions on how to share ideas and come up with a common solution.

Consolidated and Augmented Faculty Research Targets and Research Environment Development: I will improve our faculty research environment. I will encourage research with students through FURP. I will encourage staff and colleagues for internal and external grants like SURGE, UPGRADE, ORG grants and external funding bodies like UAE and Qatar foundations.

Reorganized Exams Process and Security: FCIT exams process will be improved, and exam security will be made more intact.

Navigated Uses of Latest technology: **va**rious Software like ABC Flowcharter, ADONIS, ASCENT, AXIOM, Concept Base, CBdoc, CoolGen, Decamerone DBMain, Edge Diagrammer, ER-Studio, Embarcadero Describer, ERD, ERWin, InterProcs,MetaCase/MetaEdit+, Oracle Designer, Rational Rose, Relationship Diagrammer, SSADM, Smart Draw, Systems Architect, Visio,MetaEdit+,Graphical tools link, Net Scan, Metlab7, SPSS, Mathematica, Maple, Equation Editor, MS Office, C, C++, JAVA, SQL, Developer2000, PowerBuilder etc. will be encouraged in the faculty.

Updated Course Syllabi and Information update for all Programs: I will revise all programs according to latest market needs based on FAB input and market survey. All programs need major change, it is already identified, and with proper planning and process through quality checks, I will update the programs.

Organized Evaluation of Teaching – End Semester Feedback from the students: organization, fairness and availability of the student survey for courses and teachers will be made available and I will act on the issues raised through these surveys.

Enhanced Teaching Improvement and Future Plans: The primary focus in this process is providing an environment which promotes better learning. This means looking at all aspects of the course, not just trying to improve lecturing skills. I have found that it is especially important to remain flexible and modify the teaching methods to fit the students in the class. Some students thrive on lectures with lots of theory; others need lots of examples and visual materials. Some students learn well in groups, and others prefer more individual attention. It is important to talk to the students and grade some assignments and/or quizzes early in the course to get an idea of the various students' strengths and weaknesses. Then I can try to adjust my teaching methods accordingly, and in the process hopefully benefit all of the students.

Analyzed Teaching-Related Activities – to improve academic Environment: I will arrange Invited Talks, Conferences and Seminars, Curriculum Development and Support, and Grants.

Research Interests

Software Engineering and software project management issues like quality improvement and management, process improvement, resource models and optimization, software architecture, cyber defense systems and Mathematical Modeling, E-Learning focusing on personalized e-learning and Content Management Systems.

Courses Taught in Last 18 Years

(1). Software Engineering, **(2).** Software Project Management, **(3).** Software Testing Methodologies, **(4).** Software Quality Management, **(5).** Object Oriented Analysis and Design, **(6)** Software Design and Construction, **(7).** Management Information Systems, **(8).** Business Information Systems**, (9).** Systems Analysis and Design, **(10).** Object Oriented Programming, **(11).** Data Base Management Systems, **(12).** Data Processing, **(13).** Software Architecture, **(14).** Modeling and Simulation, **(15).** Object Oriented Software Engineering, **(16).** Computer Programming using "C" **(17).** E-Business Technologies **(18).** Data warehousing **(19).** Data Mining **(20).** Database Design and Application **(21).** Distributed Systems, **(22**). Advance Database Design, **(23).** Discrete Mathematics, **(24).** Information and computer Security, **(25).** E-Commerce**, (26**). E-environments

Software Expertise and Packages Familiarity: Microsoft Visual Studio 2010, MS Project, Weka, Packet Tracer, Oracle Enterprise Manager, Power Designer, Met Lab, SPSS, Mathematica, Java, JDK, C Programming and Star UML.

Publications in International High Impact Factor Journals:

1. Zia, K., **Saini, D.K.,** Muhammad, A., Ferscha, A., **"Nature-Inspired Computational Model of Population Desegregation Under Group Leaders Influence"**, (2018) IEEE Transactions on Computational Social Systems, Article in Press, DOI: 10.1109/TCSS.2018.281832. **(ISI and Scopus indexed)**

2. NK Al Masuudi, A Muhammad, MA Fekihal, <u>DK Saini</u> "**Planning Critical Infrastructure based on Population Growth and Environmental Constraints"**, TEM Journal, Volume 7, Issue 1, Pages 159-163, ISSN 2217-8309, DOI: 10.18421/TEM7119, February 2018. **(ISI indexed)**

3. Muzna Zafar, Kashif Zia, <u>Dinesh Kumar Saini</u>, Arshad Muhammad, Alois Ferscha **"Modeling Human Factors Influencing Herding during Evacuation",** International Journal of Pervasive Computing and Communications, Vol. 13 Issue: 2, 2017. https://doi.org/10.1108/IJPCC-03-2017-0024 **(ISI and Scopus indexed)**

4. <u>Dinesh Kumar Saini</u> and Eimad Abusham "**Software Architecture for Streaming and Packet Loss Recovery Schemes in Road Monitoring Surveillance Camera Control Systems"** Indian Journal of Science and Technology, Volume 9, Issue 48, Pages 1-7, 2016, India. **(Scopus Indexed)**

5. Kashif Zia, Arshad Muhammad, Katayoun Farrah, <u>Dinesh Kumar Saini</u> "**Mobile Sensing for Data-Driven Mobility Modelling"** International Journal of Advanced Computer Science and Applications (IJACSA, Volume 8, Issue 2, Pages 419-425, Publisher, The Science and Information Organization, U.K. **(ISI and Scopus indexed)**

6. <u>Dinesh Kumar Saini</u> "**Entropy Based Personalized Learning Management System (PeLMS) – An Approach towards Business and IT Education"** Journal of Mobile Multimedia, Vol.13 No.1&2 Sept 2017, DOI: https://doi.org/10.26421/JMM13.1-2 **(Scopus indexed).**

7. Arshad Muhammad, **Dinesh Kumar Saini**, Kashif Zia, Mabruk Ali Fekihal, "**Educational Aspects of Service Orientation: Smart Home Design issues and Technologies**", TEM Journal. Volume 6, Issue 2, Pages 250-257, ISSN 2217-8309, DOI: 10.18421/TEM6209, May 2017, **(ISI and Scopus indexed).**

8. Nitin Raut, <u>Dinesh Kumar Saini</u> and Reena Vaidya, "**Harvesting Chaetoceros Calcitrans and Nannochloropsis sp. Via Electroflocculation**", American Journal of Applied Sciences, Volume 14, Issue 9, Pages 852-861. DOI: 10.3844/ajassp.2017.852.861 **(SCOPUS Indexed).**

9. <u>Dinesh Kumar Saini</u> and Sanad Al Maskari "**Data Management Issues and Data Mining of Real Time System Application for Environment Monitoring"** MIS-Review an International Journal 20(1) Sept.2014, pp-31-43, DOI: 10.6131/MISR.2014.2001.02

10. <u>Dinesh Kumar Saini</u> and Lakshmi Sunil Prakash **"Nature Inspired Recommender Algorithms for Collaborative Web-based Learning Environments"** International Journal of Computer Applications 114(14):16-22, March 2015, Foundation of Computer Science, New York, USA, BibTeX.

11. Budour Ahmed Al Farsi and <u>Dinesh Kumar Saini</u> "**Business Intelligence Design Model (BIDM) for University",** International Journal of Computer Applications 111(14):43-49, February 2015, Foundation of Computer Science, New York, USA, BibTeX.

12. Samir K Amin, <u>Dinesh Kumar Saini</u> and Hemant Gaur "**Health Reference Information Model Architecture Research Issues and Challenges"** International Journal of Computer Applications 83(14):31-36, December 2013, Foundation of Computer Science, New York, USA, BibTeX.

13. Nitin Raut, <u>Dinesh Kumar Saini</u>, and Ganesh Shinde "**Environmental Informatics and Soft Computing Paradigm – Processing of Cocos Nucifera Shell Derived Activated Carbon for Treatment of Distillery Spent Wash-a Solution to Environmental Issue"** Advances in Environmental Chemistry, Hindwai, Volume 2014, Article ID 737963, 11 pages, doi/10.1155/2014/737963.

14. <u>Dinesh Kumar Saini</u> "**Prioritizing Test Case Generation for Software Testing in High-Level Programming Development Environment",** International Journal of Computer Applications 82(14):64-70, November 2013, Foundation of Computer Science, New York, USA. BibTeX.

15. <u>Dinesh Kumar Saini</u>, Mabruk Fekihal and Ibrahim Jaluta, **"Information Collaboration Framework for Health Care Management System",** International Journal of Computer Applications 65(25):28-32, March 2013, Foundation of Computer Science, New York, USA. BibTeX. 10.5120/11274-6522.

16. <u>Dinesh Kumar Saini</u> and Moinuddin Ahmad, "**Return on Investment and Effort Expenditure in the Software Development Environment",** International Journal of Applied Information Systems 4(7):35-41, December 2012, Foundation of Computer Science, New York, USA. BibTeX 10.5120/ijais12-450813

17. Jabar H Yousif and <u>Dinesh Kumar Saini</u>. "**Cloud Computing and Accident Handling Systems",** International Journal of Computer Applications 63(19):21-26, February 2013, Foundation of Computer Science, New York, USA. BibTeX 10.5120/10574-5626.

18. <u>Dinesh Kumar Saini</u> and Jabar H Yousif, **"Environmental Scrutinizing System based on Soft Computing Technique",** International Journal of Computer Applications 62(13):45-50, January 2013, Foundation of Computer Science, New York, USA. BibTeX 10.5120/10143-4952.

19. <u>Dinesh Kumar Saini</u> and Lakshmi Sunil Prakash, **"Plagiarism Detection in Web-based Learning Management Systems and Intellectual Property Rights in the Academic Environment",** International Journal of Computer Applications 57(14):6-11, November 2012, Foundation of Computer Science, New York, USA. BibTeX 10.5120/9180-3598.

20. <u>Dinesh Kumar Saini</u> and Vikas Singh, "**Soft Computing Techniques in Cyber Defense",** International Journal of Computer Applications 50(20):17-22, July 2012, Foundation of Computer Science, New York, USA. BibTeX 10.5120/7919-1217.

21. Dinesh Kumar Saini and Jabar H Yousif, "**Soft Computing Techniques for Mishaps Prediction"** International Journal of Computer Applications 47(8):1-7, June 2012. Published by Foundation of Computer Science, New York, USA. BibTeX, 10.5120/7205-9989.

22. Dinesh Kumar Saini and Moinuddin Ahmad, **"Business Aspect of Software Reusability",** International Journal of Applied Information Systems 4(7):28-34, December 2012. Published by Foundation of Computer Science, New York, USA. BibTeX, 10.5120/ijais12-450812

23. Dinesh Kumar Saini "**A Mathematical Model for the Effect of Malicious Object on Computer Network Immune System"** Applied Mathematical Modelling, 35(2011) Page No. 3777-3787 USA, doi:10.1016/.2011.02.025**. (ISI and SCOPUS Indexed)**

24. Dinesh Kumar Saini and Jabar H Yousif. "**Soft Computing Techniques for Mishaps Prediction",** International Journal of Computer Applications, Volume 47, Number 8 Page No.1-7, June 2012. Published by Foundation of Computer Science, New York, USA

25. Dinesh Kumar Saini **"Software Testing for Embedded Systems"** International Journal of Computer Applications, Published by Foundation of Computer Science, New York, USA, Volume 43 Number 17, April 2012 Page No. 1-6.

26. Dinesh Kumar Saini, Lingaraj A. Hadimani and Nirmal Gupta "**Software Testing Approach for Detection and Correction of Design Defects in Object Oriented Software"** Journal of Computing, Volume 3, Issue 4, April 2011, ISSN 2151-9617, Page No. 44-50

27. Dinesh Kumar Saini "**Security Concerns of Object-Oriented Software Architectures"** International Journal of Computer Applications, Feb 2012, 40 (11), Page No. 41-48.

28. Samir K Amin, Khairuddin Bin Omar and Dinesh Kumar Saini **"Information Extraction: A wrapper Approach "**Journal of Computing, Volume 4, Issue 5, May 2012, Page No. 171-177.

29. Dinesh Kumar Saini and Yashvardhan Sharma **"Soft Computing Particle Swarm Optimization based Approach for Class Responsibility Assignment Problem"** International Journal of Computer Applications, Feb 2012, 40 (12), Page No 19-24.

30. Jabbar Yousif and Dinesh Kumar Saini **"Hindi Part-of-Speech Tagger Based Neural Networks"** Journal of Computing, Volume 3, Issue 2, March, 2011, ISSN 2151-9617, Page No. 59-66.

31. Bimal Kumar Mishra and Dinesh Kumar Saini **"Mathematical Models on Computer viruses"** Elsevier International Journal of Applied Mathematics and Computation, 187(2), 929-936. Volume 187, Issue 2, 15 April 2007, Pages 929-936. USA, (ISI and SCOPUS Indexed)

32. Bimal Kumar Mishra and Dinesh Kumar Saini "**SEIRS epidemic model of transmission of malicious objects in computer network"** Elsevier International Journal of Applied Mathematics and Computation, Volume 188, Issue 2, 15 May 2007, Pages 1476-1482. USA, (ISI and SCOPUS Indexed)

33. Dinesh Kumar Saini and Bimal Kumar Mishra **"Design Patterns and their effect on Software Quality"** Vol.5, No.1, January 2007, Page356-365 ACCST Research Journal, INDIA

34. Dinesh Kumar Saini and Hemraj Saini **"Proactive Cyber Defense and Reconfigurable Framework for Cyber Security"** International Review on computer and Software (IRCOS) Vol.2. No.2. March 2007, Pages 89-98. ITALY, (SCOPUS Indexed)

35. Dinesh Kumar Saini and Nirmal Gupta **"Fault Detection Effectiveness in GUI Components of Java Environment through Smoke Test",** Journal of Information Technology, ISSN 0973-2896 Vol.3, issue3, 7-17 September 2007, **(SCOPUS Indexed)**

36. Dinesh Kumar Saini and Hemraj Saini **"VAIN: A Stochastic Model for Dynamics of Malicious Objects",** the ICFAI Journal of Systems Management, Vol.6, No1, pp. 14- 28, February 2008. INDIA **(SCOPUS Indexed)**

37. Hemraj Saini and Dinesh Kumar Saini **"Malicious Object dynamics in the presence of Anti-Malicious Software" European Journal of Scientific Research** ISSN 1450-216X Vol.18 No.3 (2007), pp.491-499 © Euro Journals Publishing, Inc. 2007 http://www.eurojournals.com/ejsr.htm EUROPE **(SCOPUS Indexed)**

38. Dinesh Kumar Saini and Nirmal Gupta **"Class Level Test Case Generation in Object Oriented Software Testing,** International Journal of Information Technology and Web Engineering, (IJITWE) Vol. 3, Issue 2, pp. 19-26 pages, march 2008. USA, **(ISI and SCOPUS Indexed).**

39. Hemraj Saini, Dinesh Kumar Saini, Nirmal Gupta, "**Cyber Defense Architecture in Campus Wide Network System "I**nternational Journal of Theoretical and Applied Information Technology (JATIT)-(E-ISSN 1817-3195, ISSN 1992-8645), April 2008. Europe.

40. Dinesh Kumar Saini **"Testing Polymorphism in Object-Oriented Systems for improving software Quality"** ACM SIGSOFT Volume 34 Number 2 March 2009, ISSN: 0163-5948, USA **(SCOPUS Indexed)**

41. Lakshmi Sunil Prakash, Dinesh Kumar Saini and Kutti N.S. **"Integrating EduLearn Learning Content Management System (LCMS) with Cooperating Learning Object Repositories (LORs) in a Peer to Peer (P2P) architectural Framework"** ACM SIGSOFT Volume 34 Number 3 May 2009, ISSN: 0163-5948, USA. **(SCOPUS Indexed)**

42. <u>Dinesh Kumar Saini,</u> Jabar H. Yousif, and Wail M. Omar **"Enhanced Inquiry Method for Malicious Object Identification"** ACM SIGSOFT Volume 34 Number 3 May 2009, ISSN: 0163-5948, USA. **(SCOPUS Indexed)**
43. H Saini, <u>D.K. Saini,</u> and N. Gupta "E-**Business System Development: Review on Methods, Design Factors, Techniques and Tools with an Extensive Case Study for Secure Online Retail Selling Industry"** Journal of science and Technology (ISSN 0974-6846), Vol.2. No.5, May 2009, India. **(SCOPUS Indexed)**

Forthcoming submitted Journal Articles 2018

44. Missing Observation Approximation for Spatio-Temporal Problem Reconstruction **International Journal of Data Analysis Techniques and Strategies**, (ISI indexed), IF = 0.39 **(accepted but need to resubmit in some other Journal, impact is low, but article is having good potential)**
45. A model investigating conditions leading to resistance against unpopular norm**, Informatica,** (ISI indexed), IF = 0.36 (Under Review)
46. Behavior-Based Swarm Robotic Search and Rescue using Fuzzy Controller, Computer **and Electrical Engineering,** (ISI indexed), IF = 2.50 (Accepted).
47. Ambient Assisted Evacuation in Hybrid Multi-Exit Environment, International **Journal of Information and Decision Sciences,** IF = 0.54 (Accepted).
48. Image Processing using Average Local Binary Structure for Driver Eye Monitoring for Road Accident, **Journal of Expert Systems, (ISI indexed)- (Communicated)**

Book Chapters published

49. Lakshmi Sunil and <u>Dinesh Kumar Saini</u> "**Instructional Design Technology in Higher Education System: Role and Impact on Developing Creative Learning Environments"** Handbook of Research on Creative Problem-Solving Skill Development in Higher Education, Pages 378-406, Publisher, IGI Global USA.
50. Wail M.Omar, <u>Dinesh Kumar Saini</u> and Mustafa Hassan **"Credibility Of Digital Content in a Healthcare Collaborative Community**" Software Tools and Algorithms for Biological Systems in book series "Advances in Experimental Medicine and Biology, AEMB" Springer, Volume 696, Part 8, Page No. 717-724, DOI: 10.1007/978-1-4419-7046-6_73,

Magazine chapter published

51. <u>Dinesh Kumar Saini</u> **"Sense the Future**" Campus Volume 1- Issue 11, Page No14-17, February 2011.

International Conferences Published Paper

52. Arshad Muhammad, Kashif Zia, **<u>Dinesh Kumar Saini</u>**, "**Agent-based Simulation of Socially-inspired Model of Resistance against Unpopular Norms"** Proceedings of the 10th International Conference on Agents and Artificial Intelligence, ICAART 2018, Volume 1, 133-139, Funchal, Madeira, Portugal, January 16-18, 2018. SciTePress 2018, ISBN 978-989-758-275-2
53. Kashif Zia, **<u>Dinesh Kumar Saini</u>**, Umar Farooq, Alois Ferscha, "**Web of Social Things: Socially-Influenced Interaction Modeling"**, 2017/12/4, Conference Proceedings of the 15th International Conference on Advances in Mobile Computing & Multimedia,(MoMM2017) Salzburg, Austria, December 04-06, 2017 Pages 123-130, Publisher, ACM.
54. Kashif Zia, Arshad Muhammad, and **<u>Dinesh Kumar Saini</u>, "Socially Aware Peers for Futuristic Web of Things"** 9th IEEE Conference on Intelligent Data Acquisition and Advanced Computing Systems (IDAACS), Bucharest, Romania, September 21-23, 2017, Volume 2, Pages 579-585, Publisher IEEE, 10/2017.
55. <u>Dinesh Kumar Saini</u>, Dikshika Ahir, Amit Ganatra, "**Techniques and challenges in building intelligent systems: anomaly detection in camera surveillance",** In: Satapathy S., Das S. (eds) Proceedings of First International Conference on Information and Communication Technology for Intelligent Systems: Volume 2. Smart Innovation, Systems and Technologies, vol 51. Springer, Cham, 2016.
56. <u>Saini D.K.</u>, Prakash L.S., Gaur H. (2016) "**Information Communication Technologies for Research and Academic Development".** In: Satapathy S., Joshi A., Modi N., Pathak N. (eds) Proceedings of International Conference on ICT for Sustainable Development. Advances in Intelligent Systems and Computing, vol 409. Springer, Singapore, 2016.
57. Mabruk Fekihal, Ibrahim Jaluta and <u>Dinesh Kumar Saini</u> **"TB±tree: Index Structure for Information Retrieval Systems",** Proceedings of The Second International Conference on Computer Science, Computer Engineering, & Social Media, Lodz, Poland 2015, Volume 2, Issue 1, Pages 182-187, Publisher, IEEE, 10/2015.

58. Prakash, Sunil, <u>Dinesh Kumar Saini</u>, and Lakshmi Sunil. "**Factors influencing Progression Rate in Higher Education in Oman-Data Engineering and Statistical Approach."** Proceedings of the World Congress on Engineering, London UK, July 3-5, Vol. 1. 2013.

59. Prakash, Lakshmi Sunil, and **Dinesh Kumar Saini**. "**E-assessment for e-learning." Engineering Education: Innovative Practices and Future Trends** (AICERA), 2012, IEEE International Conference on. IEEE, 2012.

60. <u>Dinesh Kumar Saini</u> and Moinuddin Ahmad, "**Managing Global Computing Resources**" International Conference on Reliability, Infocom Technologies, and Optimization'2013 in association with CSI and Technically co-sponsored by IEEE, Jan.29th to 31st of 2013, Noida India.

61. Namita Gupta and <u>Dinesh Kumar Saini</u> **"Data Analytics for Accident Analysis"** Proceedings of the International Conference on Knowledge Management and Information Sharing (ICKMARS) Feb 27-28, 2012, Muscat, Oman. pp 23-28.

62. Sanad Al Maskari, <u>Dinesh Kumar Saini</u> and Tony Chaffing's "**Data Mining for Environment Monitoring**", Proceedings of International Conference on Software Technology and Engineering (ICSTE 2012), Pages 6, DOI 10.1115/1.860151_ch87

63. <u>Dinesh Kumar Saini</u> and Mukta Goyal "**Software Reusability and Cost Models- An Effective Comparison"** RAIT 2012, India.

64. <u>Dinesh Kumar Saini</u> and Moinuddin Ahmad **"Software Failure and Chaos Theory"** The 2012 International Conference on Computer Science" World Congress in Engineering (WCE2012), London, UK, July 3-6 pp.

65. <u>Dinesh Kumar Saini</u> and Moinuddin Ahmad "**Modeling of Object Oriented Software Testing Cost**" The 2011 International Conference on Software Engineering Research and Practice (SERP'11), World Congress in computer Science and Engineering, July 18-21, 2011, Las Vegas, USA. Pp. 333-339.

66. <u>Dinesh Kumar Saini</u> and Moinuddin Ahmad "**Enhanced Software Quality Economics for Defect Detection Techniques Using Failure Prediction"** The 2011 International Conference on Software Engineering Research and Practice (SERP'11) World Congress in computer Science and Engineering July 18-21, 2011, Las Vegas, USA, PP. 346-351.

67. S L Saini, <u>Dinesh Kumar Saini</u>, and Jabar H. Yousif "**Cloud Computing and Enterprise Resource Planning Systems**" The 2011 International Conference of Manufacturing Engineering and Engineering Management (ICMEEM-2011), World Congress in Engineering, July 6-9th London UK, PP.681-686.

68. <u>Dinesh Kumar Saini</u> and Raj Kumar Somani "**Malicious objects propagation dynamics in the network"**, International Conference on Emerging Trends in Networks and Computer Communications (ETNCC), 2011, Digital Object Identifier: 10.1109/ETNCC.2011.5958484, Publication Year: 2011 , Page(s): 47 – 51.

69. <u>Dinesh Kumar Saini</u>, Lingaraj A Hadimani, Poonam V Vaidya and Sanad Al Maskari "**Software Quality Model Six Sigma Initiatives**" The 2011 International Conference of Computer Science and Engineering (ICCSE-2011), World Congress in Engineering, July 6-9th London UK, PP. 1226-1231.

70. <u>Dinesh Kumar Saini</u>, Nebras N. Hasoon, Feras N. Hasoon, and Mustafa Hasan. "**Review of Query Processing in Distributed Systems**", Proceedings of the INFORMATICS 2011 IADIS, International Association for Development of the Information Society, July 20-26, 2011, Rome Italy. Pp 117-123

71. <u>Dinesh Kumar Saini</u>, Sanad Al Maskari, R G Dabhade, Sandhya V Khandage and Lingaraj A. Hadimani "**Broker Architecture for Quality of Service**" The 2011 International Conference on Information Security and Internet Engineering, (ICISIE-2011), World Congress in Engineering, July 6-9th London UK, PP 484-490.

72. <u>Dinesh Kumar Saini</u>, Maskari, S.A.; Saini, H., "**Malicious objects trafficking in the network"** Digital Content, Multimedia Technology and its Applications (IDCTA), 2011 7th International Conference, Busan Korea, PP. 64-69.

73. <u>Dinesh Kumar Saini</u>, Imran Azad, Nitin B Raut, and Lingaraj A. Hadimani, "**Utility Implementation for Cyber Risk Insurance Modeling"** The 2011 International Conference of Information Engineering, (ICFE-2011) World Congress in Engineering, July 6-9th London UK, PP429-432.

74. Nebras N. Hasoon, Feras N. Hasoon and Mustafa Hasan, <u>Dinesh Kumar Saini</u>, "**Generic Framework for Monitoring Air Pollution in the Sohar Industrial Region",** Proceedings of the E-Justice, E-Democracy, and E-Society, IADIS, International Association for Development of the Information Society, July 20-26, 2011, Rome Italy. PP 201-207

75. Lingaraj A. Hadimani, <u>Dinesh Kumar Saini</u>, Vaishali P Khoche and Sanad Al Maskari, **"Comparison of Software and Hardware Design Tools (CASE vs. Simulators)"** The 2011 International Conference of Manufacturing Engineering and Engineering Management, (ICMEEM-2011), World Congress in Engineering, July 6-9th London UK

76. Sanad Al Maskari, <u>Dinesh Kumar Saini</u>, Swati Y Raut and Lingraj A Hadimani, **"Security and Vulnerability Issues in University Networks"** The 2011 International Conference of Information Security and Internet Engineering (ICISIE-2011) World Congress in Engineering, July 6-9th London UK

77. Jabar H.Yousif, <u>Dinesh Kumar Saini</u> and Hassan S. Uraibi, "**Artificial Intelligence in E-Leaning-Pedagogical and Cognitive Aspects"** The 2011 International Conference on Computational Intelligence and Intelligent Systems (ICCIIS-201), World Congress in Engineering, July 6-9th   London UK

78. Nitin B Raut, Jabar H. Yousif, Sanad Al Maskari, and <u>Dinesh Kumar Saini</u> "**Cloud for Pollution Control and Global Warming**" The 2011 International Conference of Information Engineering (ICIE-2011), World Congress in Engineering, July 6-9th   London UK

79. <u>Dinesh Kumar Saini</u>, N.Hasson, F.Hasson, Mustafa Hassan, **"Review of Query Processing in Distributed Systems"** Informmatics-2011, IADIS International Conference Italy July 21-26 , 2011.

80. N.Hasson, F.Hasson, <u>Dinesh Kumar Saini</u>, "**Generic Framework for Monitoring Air Pollution in Sohar Industrial Region**", ICT, Society and Human Being-2011, IADIS International Conference Italy July 21-26, 2011.

81. <u>Dinesh Kumar Saini,</u> Sanad Al Maskari and Hemraj Saini, "**Malicious Object Trafficking in the Network"** IEEE IDCTA-2011, Korea, August 13-16, 201.

82. Dinesh Kumar Saini, Sanad Al Maskari and Lingraj Hadimani **"Mathematical Modeling of Software Reusability"** 3rd IEEE International Conference on Machine Learning and Computing (ICMLC,2011)Singapore, February 26-28, 2011, IEEEXplore, 978-1-4244-9253-4/11.

83. <u>Dinesh Kumar Saini,</u> Wail M Omar and Sanad Al Maskari **"Healthcare Collaborative Framework for Chronic Disease Management in Oman"** proceedings of International Conference on Multidisciplinary Approaches to Diabetes Research and Health (ICMADRH-2010), India, pp 46-52.

84. <u>Dinesh K Saini</u>, Mustafa Hasan "**Architecture and Classification algorithms for large P2P Digital Library"** The Second International Conference on Networked Digital Technologies OpenConf system, Crez Republic Europe 2010.

85. <u>Dinesh Kumar Saini,</u> Wail M. Omar "**Software Testing For Semantic Service Oriented Architecture for E-Health Software Services"** SERP'10 - 9th international Conference on Software Engineering Research and Practice (USA) http://www.world-academy-of-science.org/, pp.. 240-246.

86. <u>Dinesh Kumar Saini,</u> Wail M. Omar "**Cyber Defense Architecture for Campus Intranet**" SAM'10 - 9th International Conference on Security and Management (2010, USA) http://www.world-academy-of-science.org/, pp.. 87-93.

87. Sanad Al-Maskari, <u>Dinesh Kumar Saini</u> and Wail M Omar **"Cyber Infrastructure and Data Quality for Environmental pollution control – in Oman"** International Conference on Data Analysis, Data Quality and Metadata Management (DAMD 2010) Singapore.

88. <u>Dinesh Kumar Saini</u> and Mustafa Hasan "**Building Digital Library for Large P2P Networks**" IKE'10 - 9th International Conference on Information and Knowledge Engineering (2010, USA) http://www.world-academy-of-science.org/ pp. 185-189

89. <u>Dinesh Kumar Saini</u>, Wail M. Omar **"Web 2.0 and Healthcare collaborative Framework for Health Awareness and Education"** BIOCOMP'10 - 11th International Conference on Bioinformatics and Computational Biology (2010, USA) http://www.world-academy-of-science.org/ pp. 561-564

90. Osama A Rahmeh, Princy Johnson and <u>Dinesh Kumar Saini</u> "A **Latency Optimizing Load Distribution Scheme for Grid Networks"** 8th international conference on Grid Computing and Application (GCA2101), July 12-15, 2010, USA, http://www.world-academy-of-science.org pp.. 70-76.

91. <u>Dinesh Kumar Saini</u>, Osama Abu Rahmeh, H. Saini, Wail M. Omar "**Extended Secure Architecture of HIS: HL7"** BIOCOMP'10 - 11th International Conference on Bioinformatics and Computational Biology (July 12-15, 2010, USA) http://www.world-academy-of-science.org, pp. 617-623.

92. Dinesh K Saini, Wail M Omar , Mustafa Hassan, Khamsa Enaya and Saima Yazdani "**University- Industry Linkage: Sohar University Experience with Case Study on Cisco Event as Experience for Learning in Developing Local Talent in Sultanate of Oman"** MIT LNC Conference 2010   May 23-26 MIT USA .

93. <u>Dinesh Kumar Saini</u>, Lakshmi Sunil Prakash and Wail M Omar **"Review of Technological Challenges in Web - Based Learning Content Management Systems (LCMS) with special emphasis on extraction of Learning Contents"** International Symposium, College of Applied Science, Ministry of Higher Education, April 13-16, 2010, Oman, pp. 43-49.

94. Omima, Badriya, Hanna and <u>Dinesh K Saini</u> "**E-Portal for Oman Industries"** Undergraduate Research Conference (URC2010) in Gulf Region, Zayed University, Dubai UAE May 2010.

95. <u>Dinesh Kumar Saini</u> and Hemraj Saini **"Cyber Defense: Use of AI Techniques,"** 3rd International Conference on Quality, Reliability and INFOCOM Technology (Trends and Future Directions), 2-4 December, 2006, Indian National Sciences and Academics, New Delhi (India). Conference proceeding.

96. <u>Dinesh Kumar Saini</u> and Hemraj Saini "**Cyber Defense Architecture in Campus Wide Network,"** 3rd International Conference on Quality, Reliability and INFOCOM Technology (Trends and Future Directions), 2-4 December, 2006, Indian National Sciences and Academics, New Delhi (India) conference proceeding.

97. Dinesh Kumar Saini and Hemraj Saini **"Achieving Quality Through Testing Polymorphism in Object-Oriented Systems,"**3rd International Conference on Quality, Reliability and INFOCOM Technology (Trends and Future Directions), 2-4 December, 2006, Indian National Sciences and Academics, New Delhi (India). Conference proceeding.

98. Dinesh Kumar Saini and Hemraj Saini "**Issues and Problems in Generation of Automated Test Data for Object-Oriented Systems,"** 3rd International Conference on Quality, Reliability and INFOCOM Technology (Trends and Future Directions), 2-4 December, 2006, Indian National Sciences and Academics, New Delhi (India) Conference proceeding.

99. Dinesh Kumar Saini and Hemraj Saini **"Statistical Modeling of Extensibility in software"** 3rd International Conference on Quality, Reliability and INFOCOM Technology (Trends and Future Directions), 2-4 December, 2006, Indian National Sciences and Academics, New Delhi (India). **ISBN** 81–7446–434–4 Conference proceeding.

100. Dinesh Kumar Saini and Hemraj Saini **"Compliance Management Framework and Methodology"**, 8th International Research Conference on Quality, Innovation and Knowledge Management, Feb 11-14, 2007 at IMT New Delhi Sponsored by CII, IBEF, Monash University **.**

101. Dinesh Kumar Saini and Hemraj Saini **"An Exploratory Study of Software Metrics on Performance Issues of Web Services"** International Conference on Controls, Automation and Communication Systems (ICCACS) at Bhubaneswar December 2004.

102. Dinesh Kumar Saini and Hemraj Saini "**Engineering A Hierarchical Framework For QoS Related Issues In Multimedia Internet works"** International Conference on Controls, Automation and Communication Systems (ICCACS) at Bhubaneswar December 2004

103. Dinesh Kumar Saini and Hemraj Saini "**Quality And Benchmarking For EMS Systems"** International Conference on Quality at D.A.V. Indore M.P. India Dec.2002.

104. Dinesh Kumar Saini and Hemraj Saini "**Quality and Reliability of E-Business Application"** International Conference on Quality Reliability and Control (In Communication and Information Systems) I.I.T.Mumbai, ISSN 0972-6454, December 2001.

105. Dinesh Kumar Saini and Hemraj Saini **"Quality and Reliability of Bluetooth Technology"** international Conference on Quality Reliability and Control (In Communication and Information Systems) I.I.T.Mumbai, , ISSN 0972-6454, December 2001.

106. Hemraj Saini and Dinesh Kumar Saini **"Effective Detection of Malicious Attacks by Using Shared Double Honey pot"** ICIT (IEEE Sponsored) Rourkella-2007.

107. Hemraj Saini and Dinesh Kumar Saini **"AN Automated Test framework for Java Application"** ICIT (IEEE Sponsored) Rourkella-2007.

108. Dinesh Kumar Saini and Hemraj Saini **"Cyber Wars and Defense: an Introduction"** National Symposium on Cyber Forensics and Computer Crimes, 11th - 13th August, 2006, Punjabi university (Patiala)-Punjab.

109. Dinesh Kumar Saini and Hemraj Saini **"Cyber Defense: Mathematical Modeling and Simulation**, National conference on Mathematical Analysis and its Real Time Applications, 16th -17th September, 2006, University of Berhampur (Berhampur)-Orissa, pp. 106-111.

110. Dinesh Kumar Saini and Hemraj Saini **"Software Metrics and Mathematical Models in the Software Development Environment for Improving its Quality"**, National Conference on Mathematical Modeling, BITS Pilani, Oct.2005

111. Dinesh Kumar Saini and Hemraj Saini **"Analytical Study of Mathematical Models For Software Reusability Metrics in Software Development Environment"** National Conference on Mathematical Modeling and Analysis – October 2004.

112. Dinesh Kumar Saini and Hemraj Saini **"Object-Oriented Software Metrics and Mathematical Models in the Software Development Environment for Improving Its Quality",** National seminar on advances in Mathematics and its Application in Engineering, Ranchi 2005.

113. Dinesh Kumar Saini and Hemraj Saini **"Mathematical Modeling of software development cost and cost of quality"** National conference on Mathematical modeling in real life problems at Sarda Group Anand Engineering College Agara.may 2005.

114. Dinesh Kumar Saini and Hemraj Saini **"Static Code Analysis"**, NSCOMCS-2005 Proceeding of National Seminar on Mathematics and Computer Science sponsored by UGC.

115. Dinesh Kumar Saini and Hemraj Saini **"A Study on Cyber Crime in India**" National Seminar on Mathematics and Computer Science, 29-30 November 2005, S.D. (P.G.) College, Muzaffarnagar.

116. Dinesh Kumar Saini and Hemraj Saini **"An analytical study of static code Analyzers**"-National Seminar on Mathematics and Computer Science, 29-30 November 2005, S.D. (P.G.) College, Muzaffarnagar India.

117. <u>Dinesh Kumar Saini</u> and Hemraj Saini **"Identification and characterization of software testing process for object-oriented systems",** National Conference on Mathematical Analysis and its Applications in Real -World Problems, Berhampur University, September

Awarded Research Grants

"E Smart System for Industrial Air Pollution Monitoring, Prediction and Management Framework funded by Research council of Oman.

Awards and Membership:
- The World Education Congress Asia Awards (2011) "**Best Professor in Information Technology Management"**.
- Advisor to the ministry of Higher education for reviewing and analyzing new programs for the universities in the sultanate of Oman.
- N.C.C "C" Certificate (Technical) 1st Raj Campo Tech National Cadets Corps.
- Secretary of HSA in BITS Pilani Rajasthan India (1995-96) Games Secretary in BITS Pilani Rajasthan India (1995-96).
- Life member of Indian Science Congress Association.
- Members ACM and ACS
- Life Member Indian Society for Technical Education
- Life Member Institution of Engineers
- Life Member IACSIT Applied Chemical Engineering Society(ACES)
- Life Member International Association of Engineers, IAENG (Member No: 111225)
- Senior Member International Safety Quality Environment & Management Association, ISQEM
- Life Member Environment Society of Oman

Editorial and Reviewer
- Applied Soft Computing – Elsevier Science Direct USA
- Editor member of International Journal of computer Science – Enformatica.
- Organizing committee member of National Conference on Mathematical Modeling and Analysis "(Member Organizing Committee, October 8 – 9, 2004 at BITS, PILANI Rajasthan India.
- Organizing committee member of an international conference on Quality Reliability and information Technology (ICQRIT)-2006 and ICQRIT 2009 Organized by INSA and Delhi University India.
- Organizing committee member of ADIS Multi Conference on Computer Science and Information Systems 2010 Freiburg, Germany, 26 – 31 July 2010.
- Reviewer for Journal of Super Computing, Springer – Germany
- Organizing committee member for International Conference on Collaborative Technology UK.
- Reviewer for the International Symposium, College of Applied Science, Ministry of Higher Education, Oman.

Invited Talk:
- Cyber Defense Systems and Proactive Defense Design March 16, 2011, Sultan Qaboos University, Oman 16.03.2011.
- Ethical, social and Security Issues in E-Business, International Symposium in the Faculty of Computing Nizwa University, Nizwa, 27.04.2011.
- Current Trends on Software Engineering, 22-24 April 2005, St. Xavier's College, Ranchi
- Advances in Software Engineering at National Seminar on Mathematics and Computer Science, 29-30 November 2005, S.D.(P.G.)College, Muzaffarnagar
- Cyber Defense National Conference on Mathematical Modeling on Real life problems, Deptt. Of Mathematics, Berhampur University, Berhampur, Sept. 16-17, 2006

Conference Organization
- 2012 International Conference on Power Science and Engineering, ICPSE 2012, Hong Kong. December 29-30, 2012
- 2017 Fourth International Conference on Artificial Intelligence and Applications (AIAP-2017), May 27-28 2017. http://ccseit2016.org/2017/aiap/committee.html

Current Job Responsibilities
- Teaching and Research, organizing educational and training programs, Coordinating and conducting research in technical education and Guiding thesis and Project Students. Promotional activities both at the departmental and institutional level at Sohar University.
- Research Fellow and Adjunct Associate Professor in the School of IT Queensland University.

- Undertaking development of curriculum and developing resource materials for the new emerging courses, areas, and programs. Administration, both at departmental and Institutional level and Lab management and Development.
- University Research Council Member, University Accreditation Council Member, University Quality Improvement Committee Member, Academic Board Member of the University, University Program review committee Member, Preparing new proposals for new programs in the faculty.

Training and workshops
- Staff development program "Leading Institutional Innovation" Local and Global Leadership Perspective and Practices delivered by Dr. Tom Kennie UK.
- Attended workshops focusing on research skills have been organized by the Research Division. The workshop given in 2010 by Professor Bob Porter from the University of Tennessee, USA, concentrated on grant writing and grantsmanship.
- In early 2012, the workshop presented by Professor Helene Marsh from James Cook University in Australia covered contemporary issues associated with the supervision of postgraduate students.
- Further workshops have been given by the Director of the RIC on a number of topics, as indicated in the accompanying table.

Personal Details:

Date of Birth: 24TH May 1974	**Marital Status:** Married
Total Dependents: 6 (Father, Mother, Wife, 2 Daughters, 1 Son)	

References:

Prof. J.P.Mishra	Prof. Paul Bailes	Eran A Edirisinghe, PhD
Unit Chief	Paul Bailes BSc(Hons) PhD	Professor of Digital Imaging,
Computer Science & Information Systems Group	FACS FIEAust	Head, Department of Computer Science,
B.I.T.S. Pilani (Raj) 333031 India	Emeritus Professor of Computer Science	Loughborough University,
Tel.No. +91-9414082461	The University of Queensland QLD	N.3.02, Haslegrave Building,
+91-159-245073-Ext 283(O)	4072 AUSTRALIA CRICOS Provider No:	Ashby Road, Loughborough,
E-Mail: jpm@bits-pilani.ac.in	00025B	Leicestershire, LE11 3TU, UK.
	E-mail: p.bailes@uq.edu.au	
	Mobile: (+61) 0438 758001	

Declaration: I hereby declare that the above-written particulars are true to the best of my knowledge and belief.

Place: Sohar University, Sultanate of Oman   **Date: 24.4.2018**