MANAV RACHNA
vidyanatariksha

MANAV RACHNA UNIVERSITY

Declared as State Private University vide Haryana Act 26 of 2014

Dr. Shruti Vashist

Designation: Dean Engineering and Dean Examination
Qualifications :Ph.D.(Electronics and Communication Engineering)
Email :deanengg@mru.edu.in
Experience: 22 Years
https://scholar.google.com/citations?user=7U7tRzcAAAAJ&hl=en

Research Interest : Wireless & Mobile Communication ,Microstrip Antenna,Semiconductor Devices

+ **Journal Publication Details:**

K. Deepa,Zaheeruddin,Shruti Vashist, 'Energy-efficient density-based Fuzzy C-means clustering in WSN for smart grids', published in Australian Journal of Multi-Disciplinary Engineering,Taylor & Francis Online. Volume 38, Issue 3 September 2020 , pp 181-187https://www.tandfonline.com/doi/full/10.1080/14488388.2020.1811454
Deepa Kalaimani ,Zaheeruddin Zah Shruti Vashist MDRP: An Energy-Efficient Multi-Disjoint Routing protocol in WSNs for Smart Grids,INTERNATIONAL JOURNAL ON SMART SENSING AND INTELLIGENT SYSTEMS Article | DOI: 10.21307/ijssis-2020-016 Issue 1 | Vol. 13 (2020),March 4th 2020
A State-of-the-Art Study on Energy Harvesting Systems: Models and Issues Rahul Yadav, Ayush Goel,Shruti Vashist and Mohit Verma,Indian Journal of Science and Technology, Vol 12(41), DOI: 10.17485/ijst/2019/v12i41/145572, November 2019 https://sciresol.s3.us-east-2.amazonaws.com/IJST/Articles/2019/Issue-41/Article7.pdf
The Qualitative Study on Input – Output Channel Configurations in Wireless Body Area Network SavitaSindhu,ShrutiVashist,V.R.Singh,Amit KumarTyagi ,https://doi.org/10.1016/j.procs.2020.01.022INTERNATIONAL CONFERENCE ON RECENT TRENDS IN ADVANCED COMPUTING 2019, ICRTAC 2019 Available online at www.sciencedirect.co
Evaluation of Non-Orthogonal Techniques for Advance Wireless System Dipa Nitin Kokane, Geeta Nijhawan, Shruti Vashist,International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-2, July 2019
Design of E-shaped and Circular Array Antenna to Improve the Performance for WLAN and WiMax Network, Poonam Ghanghas, Shruti Vashist2 Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 04-Special Issue, 2019
A PSO Based Antenna Array Optimization For Wimax And WLAN Application,Poonam Ghanghas, Shruti Vashist, Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 07-Special Issue, 2018

Location based protocols in WSN: A Review, IIOAB Engineering Technology, ISSN: 0976-3104, Vaishali Mittal , Snigdha Pokhriyal , Harshita Srivastava , Shruti Vashist, Mohit Verma,Vol 9,May 2018. review - The IIOAB Journal
Wireless Body Area Networks Mitigation method using Equalization, World Academy of Science Engineering and Technology, International journal of computer and Information Engineering ,ISSN:2279-0764, Savita Sindhu and Shruti Vashist,Vol 11,No.7,Pg.930-937,July 2017, http://dx.doi.org/10.14738/jbemi.43.3169
Diversity techniques in Wireless Body Area Network, International Journal of Engineering and Technology (IJET) Scopus Indexed, ISSN: 2227-524X,Savita Sindhu and Shruti Vashist Vol 9,No.3,Pg 2111-2118,July 2017. http://www.enggjournals.com/ijet/docs/IJET17-09-03-169.pdf
A Robust Approach for Medical Image Enhancement using DTCWT, International Journal of Computer Applications , Gagandeep ,Shruti Vashist, Vol 167,No.6,Pg-26-29,June 2017. www.ijcaonline.org/archives/volume167/number6/kaur-2017-ijca-914316.pdf
Comparative Study of Medical Image Contrast Enhancement using Discrete Wavelet Transform and Dual Tree Complex Wavelet Transform, Journal of Biomedical Engg and Medical Imaging,Gagandeep ,Shruti Vashist Vol 4 ,Issue 2,pg 105-114,April 2017 http://scholarpublishing.org/index.php/JBEMi/article/view/3109
Design and Implementation of WBAN, Journal of Biomedical Engineering and Medical Imaging, Savita Sindhu and Shruti Vashist,Vol 4 No.1,PP-13-20,February 2017 https://pdfs.semanticscholar.org/27ef/267269ac99af2bf933612a8f6dfa835b0e9e.pdf
Performance of DCO-OFDM in Optical Wireless Communication System, International Journal of Innovative Research in Advanced Engineering (IJIRAE) ISSN: 2349-2763, Sakshi Verma, Shruti Vashist,Issue 6,Vol 3,June 2016.https://www.scribd.com/document/317130717/Performance-of-DCO-OFDM-in-Optical-Wireless-Communication-System
A Review on Wireless Body Area Network (WBAN) for Health Monitoring System: Implementation Protocols, Savita Sindhu, Shruti Vashist and S K Chakarvarti, Communications on Applied Electronics, Published by Foundation of Computer Science (FCS), NY, USA, 4(7):16-20, March 2016.http://www.caeaccess.org/research/volume4/number7/sindhu-2016-cae-652130.pdf
A Review on the Development of Rotman Lens Antenna,Chinese Journal of Engineering, Shruti Vashist, M.K.Soni, Pramod Singhal, Volume 2014, Article ID 385385,July 2014 http://www.hindawi.com/journals/cje/2014/385385/
Design and Performance Analysis of Wide angle Microwave Lens for Wireless Communication, Shruti Vashist, M.K.Soni, Pramod Singal,International Journal of Computer Applications,0975 – 888, Volume 85 – No 12, January 2014 . http://research.ijcaonline.org/volume85/number12/pxc3893364.pdf
Rotman Lens Performance Analysis, Shruti Vashist, M.K.Soni, Pramod Singal,ACEEE Int.Journal of Image Processing,2152-5056, Vol. 5, No. 1, January 2014. https://archive.org/stream/indexing_theides_1534/1534_djvu.txt
Optimization of Rectangular Patch Antenna, International Journal of Multidisciplinary Consortium,Anjuli Singh,Shruti Vashist, Volume 1,Issue 1,pp.1-11,July 2014, http://ijmc.rtmonline.in/vol1iss1/043020.pdf
Study of Wireless Sensor Network Using LEACH Protocol, International Journal of Innovative Technology and exploring Engineering(IJITEE),Himashi,Shruti Vashist, Vol 3,Issue 2, July 2013 http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.677.9939&rep=rep1&type=pdf
Design of a Square Microstrip Patch Antenna International Journal of Innovative Technology and Exploring Engineering (IJITEE), Shruti Vashist, M.K.Soni, Pramod Singal, ISSN: 2278-3075, Volume-1, Issue-1, June 2012.http://www.oalib.com/paper/2181414
Genetic Approach in Patch Antenna Design, International Journal of Emerging Science and Engineering (IJESE), 2319–6378, pp.75-76 , July 2013Volume-1, Issue-9. Shruti Vashist, M.K.Soni, Pramod Singal.http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.678.8690
Design And Performance Analysis Of Rotman Lens , International Journal of Engineering Research and Applications (IJERA),Shruti Vashist, Umesh Dutta, Dr.M.K.Soni, ISSN: 2248-9622 www.ijera.com Vol. 2, Issue4, July-August 2012, pp.1792-1795 . http://www.ijera.com/papers/Vol2_issue4/KO2417921795.pdf

Analysis of Microstrip Antenna Array, IJMER, Shruti Vashist, M.K.Soni, Pramod Singal, vol2, issue 6, Nov-Dec2012.http://www.ijmer.com/papers/Vol2_Issue6/FI2647544756.pdf
Selection of Antenna for Wireless Communication Systems, Manav Rachna International Journal Ms.Shruti Vashist ,Dr.M.K.Soni, ,June 2011

+ **Conference Publications:**

Dipa Kokane,Shruti Vashist and Geeta Nijhawan,"Network COnnectivity Technologies for Internet of Things",at International Confrence on Artificial Intelligence and smart systems(ICAIS 2022),organized by JCT college of Engineering and Technology,Coimbatore,India on 23-25th Feb 2022
Vijay Kumar Gill, Shiv Kumar Dixit, Shruti Vashist ,"Effect of n-CdS layer thickness on the power conversion efficiency of pCIGS/n-CdS/n-ZnO solar cell: A numerical simulation study XXI International Workshop on Physics of Semiconductor Devices (IWPSD 2021) IWPSD 2021 (Virtual Conference) held at Indian Institute of Technology Delhi,14th-17th Dec 2021
Charu Pathak, Shruti Vashist ,"Low cost portable cold storage system for fruits and vegetables during lockdown",4th International e Conference on Frontiers in Computer & Electronics Engineering and nanoTechnology orgabized by Sanjeevan Engineering and Technology Institute, Panhala and Yashwantrao Patil Science College, Solankur, **Online,19th 20th Nov 2021**
Singh, P. L., Sindhwani, R., Vashist, S., Kumar, R., Sharma, B.P. & Gupta, T. (2021). Modelling and Analysis of Barriers to implement Online Education in India. 6th International Conference on Advanced Production & Industrial Engineering (ICAPIE-2021), Delhi Technical University, Delhi, 18-19 June, 2021. Mechanical Engineering, Springer, Singapore.)
Singh, P. L., Sindhwani, R., Vashist, S., Kumar, R., Kumar, R. & Modi, P.A. (2021). Modelling the interrelationship among the influential factors affecting COVID-19 for stopping the chain transmission. . 6th International Conference on Advanced Production & Industrial Engineering (ICAPIE-2021), Delhi Technical University, Delhi, 18-19 June, 2021. (Paper is in process of publishing in Lecture Notes in Mechanical Engineering, Springer, Singapore.)
Power Allocation Optimization for Non Orthogonal Multiple Access, ICRISET 2020,4-5 September, 2020 at BVM.Dipa kokane shruti Vashist and Geeta Nihawan
Dual Band printed slot antenna for the 5G wireless communication network, Nitin Kathuria and Dr.Shruti Vashist, in 2016 International conference on wireless communication, signal processing and networking(WISPNET) 978-1-4673-9338-6/16/$31.00©2016 IEEE,pg.1864-1860,March 2016 http://dl.acm.org/citation.cfm?id=3004964
A novel compact dual band UWB antenna, Nitin Kathuria and Dr.Shruti Vashist,in 2016 International conference on wireless communication, signal processing and networking(WISPNET) 978-1-4673-9338-6/16/$31.00©2016 IEEE,pg.1888-1890,March 2016.
Design of Rotman Lens Antenna using GA,Shruti Vashist,M.K.Soni,P.K.Singhal, National Conference on Recent Trends in Microwave Engineering 2015
Dual band Microstrip Patch antenna ,Shruti Vashist,Sunita Virmani,Monika,Commune Conference on Advancements in Communication and Computing System, Gautam Buddh University Greater Noida,2012
Broad Band Microstrip Patch antenna ,Shruti Vashist,Monika ,National Conferenec on Future Mobile Systems Sept 2011.
High Gain Microstrip Patch antenna, Shruti Vashist, Monika, Commune at ICT ,Gautam Buddh University ,2011.
Wide Band Inco Rec Shaped Patch antenna,Shruti Vashist,Geeta Nijhawan,D.S.Gotra,Vimlesh Singh,National Conference on ECE ,MITS,Gwalior,2010

+ **Research Supervised(Ph.D):**

K.Deepa on "Routing in Smart Grids" Year March 2021(Completed)
Poonam Ghangas on "Design and Optimization of Microstrip Antenna Array" Year Nov 2020 (Completed).

Savita Rangi on "Framework for Energy Efficient Clustering Approach for Wireless Sensor Networks" Year – Jan 2019 (Completed)

+ Book/Chapter Publications:

Chapter in the book on Blockchain Technology and the Internet of Things,Challenges and Applications in Bitcoin and Security **Introduction to Blockchain Technology** *Geeta Nijhawan, Shruti Vashist, Anita Khosla, and Siddharth Sagar Nijhawan* (https://www.appleacademicpress.com/blockchain-technology-and-the-internet-of-things-challenges-and-applications-in-bitcoin-and-security/9781771888974
Electronic Devices and Circuits ;Manav Rachna Publications
Elements of Electronics Engineering ;Manav Rachna Publications
Analog Electronic Circuits ;Manav Rachna Publications

+ Administrative Responsibilities:

Dean Engineering
Dean Examination
Chairman ICC
Member –Committee for Admissions for the seats reserved for Haryana Domicile Students
Member-Executive Committee Red Cross Activities
Member-Institutional Grievance Redressal Committee
Member-Institution for Science and Technology
Chairperson -University Committee and Equal Opportunity Cell

+ Professional Affiliation:

Life member of The Indian Society for technical education (LM 115857)
Member of The Institution of Engineers, Calcutta (F-1228265)

+ Expert Talk Delivered

Invited as speaker in FDP on Recent trends and Innovation in Electronics Engineering on "Design Thinking " on 8th August 2020 at IIMT College of Engg Greater Noida .

+ Event Organized(Conference/Seminar/FDP/Workshops

Convenor :International conference "**Robotic Automation & Communication Engineering for Industry 4.0**" held during 4th & 5th February 2022 at Manav Rachna University organized by the deptt of Electronics and Communication Engg and Mechanical Engineering
Organizing member of 'International Conference on Soft Computing Techniques and Implementations' held during 8th till 10th October 2015. The Conference was technically supported by IEEE and ISI Kolkata
Organized and participated Workshop on 'Network Implementation and Security' at MRIU, FET on 1st June 2013
Member organizing committee of One day Workshop on IPR: Awareness and Government Initiatives, sponsored by Department of Electronics and Information Technology (DeitY), Ministry of Communications & IT, Government of India on 17th JUNE 2015

+ Awards

Awarded best faculty in 2004
Certificate of Appreciation for 10 yrs of service in MREI