



St. Joseph's Institute of Technology
St. Joseph's Group of Institutions
OMR, Chennai - 119



Department of Electronics and Communication Engineering
(Accredited by NBA)

RESEARCH & DEVELOPMENT LAB

LAB FACILITIES

S.No	List of the Software & Hardware	Category / Quantity
1	Computers	10
2	Open Source Software	11
3	PSpice	Student's Version
4	Keil μ vision	OEM with ARM Cortex M4
5	MP Lab (Hitech C)	Open Source
6	Scilab	Open Source
7	NS2 Simulator	Open Source
8	OPNET	Academic Version
9	Xilinx	OEM with Spartan Kit
10	MultiSim	Academic Version
11	SCR Characteristics Trainer	01
12	PIC Controller	01
13	Raspery Pi Kit	05
14	Arduino kit (Arudino UNO + Arudino Promicro)	10
15	Moovs IVP Tool	01
16	Spartan 6	01

R& D Facilities based PUBLICATIONS

2019-2020

S No	Name	Title of the Paper	Journal / Conference	Title of Journal / Conference, Year, Volume & Page Numbers.
1.	Dr.C.Gnana Kousalya	Digital Image Falsification Detection System for Effective Data Communication	Journal (Scopus)	International Journal of Engineering and Advanced Technology (IJEAT) Volume-9 Issue-2, December, 2019, pp: 4081- 4086.
2.	Dr.G.Rohini	Automation of Longitudinal Time Series Data Visualization using Plot Specifications Obtained from XL file	Journal (Scopus)	International Journal of Engineering and Advanced Technology (IJEAT), Volume-8 Issue-6, August 2019, PP: 3105- 3109.
3.	Mr.Gowtham Venkatesan, Mr.Charan Ramesh	Non Contact Heart Rate Monitoring using Facial Video	Journal (Scopus)	International Journal of Engineering and Advanced Technology (IJEAT) Volume-9, Issue-2, December 2019, PP: 4087- 4089.
4.	Ms.Mira Ganesh	New Medialization of Silicon DWDM demux, And Gate for Wavelengths in C and L bands	International Conference	3 rd International Conference On “Emerging Technology Trends in Electronics, Communication and Networking” (ET2ECN 2020), Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat
5.	Mr.Subhash	Smart Automated Energy Meter	International Conference	3 rd International Conference On “Emerging Technology Trends in Electronics, Communication and Networking” (ET2ECN 2020), Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat
6.	Mr.M.Senthilmurugan	Implementation of Advanced Encryption Standard Algorithm on Steganography	Journal (Scopus)	International Journal of Recent Technology and Engineering, Volume-7 Issue-5S2, January 2019,pp- 225-230
7.	Ms.C.Saranya Ms.L.Janani	Non invasive blood glucose monitoring	International Conference	3 rd International Conference on Recent Trends in Science, Engineering and Management (ICRTSEM-19), Karpaga Vinayaga College of Engineering and Technology, Kanchipuram.
8.	Ms.Sasikeerthana Ms.T.L.Hasya	LIMB motion tracking based on inertial sensors	International Conference	International Conference on Recent Development in Engineering Management Science and Technology, Dhaanish Ahmed College of Engineering, Paddapai.
9.	Ms.R.Gayathri	Detection and classification of diseases in cucumber leaves	International Conference	International Conference on Recent Development in Engineering Management Sciences and Technology (ICRDET'19), Dhaanish Ahmed College of Engineering, Paddapai.

10.	Ms.E.Janani Ms.R.Bavithra	Content based image retrieval utilizing texture colour and optimal key features	International Conference	International Conference on Recent Development in Engineering Management Sciences and Technology (ICRDET'19), Dhaanish Ahmed College of Engineering, Paddapai.
11.	Ms.Shiny Lavanya Ms.S.Sivaranjani	FSO based high bit rate data transmission using SGT wireless	International Conference	2 nd International Conference on Recent Trends in Science and Technology, GKM college of engineering and Technology, Chennai.

2018-2019

S No	Name	Title of the Paper	Journal / Conference	Title of Journal / Conference, Year, Volume & Page Numbers.
1.	Mrs.P.Princy Magdaline	Wireless stethoscope for recording heart sound using Li-Fi	Journal (Scopus)	Journal of Advance Research in Dynamical & Control Systems, 05-Special Issue, Year: 2018 Pages: 920-925
2.	Mr.Aravind Vaidhya Mr.Heman Raj	En-Route drone for medicine delivery and other emergency purposes	International Conference	International Conference on Recent Trends in Engineering Technology and Management, Coimbatore institute of engineering and technology, Coimbatore.
3.	Ms. Santoshi Gayathri	Frequency 16-tupling technique with the use of four parallel polarization modulators	International Conference	IEEE International Conference on Wireless Communication, Signal Processing and Networking (WiSPNET), SSN Engineering College, Chennai.
4.	Mr.M.Senthil murugan	Design of Hybrid Model Cryptographic Algorithm for Wireless Sensor Network	Journal (Scopus)	International Journal of Pure and Applied Mathematics Volume 117 No. 16, 2017, pp:171-177
5.	Mrs.S.Tephillah	Vehicle to Vehicle Communication for Collision Avoidance using Zigbee	Journal (Scopus)	International Journal of Science and Innovative Engineering & Technology, May 2018, Issue Volume 3,pp:3-7
6.	Mr.V.R.Balaji	Smart Kitchen with inventory monitoring and management using IoT	Journal (Scopus)	International Journal Of Innovation In Engineering Research & Management, Vol 5, No 2 (2018)
7.	Mrs.G.Akilandesar y	Survey of Network Simulator Tools	Journal	Jour of Adv Research in Dynamical & Control Systems, 11-Special Issue, July 2017,PP: 536-544
8.	Ms. B.Janani Ms. N.Akshitha	Automatic Lesion Detection Caused Due to Diabetic Retinopath	National Conference	Seventh National Conference of Research Enhancement in Advanced Computing Technologies (NCREACT'18), Rrase College of Engineering, Padappai.
9.	Ms. K.Bavithra Ms. R.Becky Georgina	Wireless Stethoscope for Recording Heart Sound Using Li-Fi	International Conference	8 th International Conference on Science and Innovative Engineering, Jawahar Engineering College, Chennai.

10.	Ms. P.Aarathi Ms. A.Lavanya	Biometric Watermarking Technique using Image Processing	International Conference	International Conference on Innovation in Science and Engineering Research (ICISER'18), New Prince Shri Bhavani College of Engineering and Technology, Chennai.
11.	Ms.M.Kavya Ms. A.Mohamed Fathima	Design of Photonic Based Millimeter wave Switch	National Conference	National Conference on Recent Trends in Information and Communication (NCRTIC'18). Bharath Institute of Higher Education and Research, Chennai.
12.	Ms.N.S. Madhura Ms. C.Neeraja	Low Crosstalk DWDM Photonic Demultiplexer	Journal	International Journal Of Innovation In Engineering Research And Management, Vol 5, No 2 (2018),PP-1-5
13.	Ms. G.Navaneetha Ms. B.Nandhu Shri	Realization of Binary Divider with Redundant Number System	International Conference	International Conference on Innovation in Science and Engineering Research (ICISER'18), New Prince Shri Bhavani College of Engineering and Technology, Chennai.
14.	Mr.Naveen A Winson Mr.Pradheep Varun Kumar	Multilevel Adaptive Hash Algorithm	National Conference	National Conference on Recent Trends in Information and Communication (NCRTIC'18). Bharath Institute of Higher Education and Research, Chennai.
15.	Mr.Praveen Kumar.B	Target Detection and Tracking using Raspberry Pi	National Conference	National Conference on Recent Trends in Information and Communication (NCRTIC'18). Bharath Institute of Higher Education and Research, Chennai.

2017-2018

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1.	Mr.M.Senthil murugan	Design of Hybrid Model Cryptographic Algorithm for Wireless Sensor Network	Journal (Scopus)	International Journal of Pure and Applied Mathematics Volume 117 No. 16, 2017, PP:171-177
2.	Ms. Santoshi Gayathri	Frequency 16-tupling technique with the use of four parallel polarization modulators	International Conference	IEEE International Conference on Wireless Communication, Signal Processing and Networking (WiSPNET), SSN Engineering College, Chennai.
3.	Ms. Varline Betty Cruze Ms. Sneha	Image Haze Removal using Dark Channel prior Algorithm	International Conference	International Conference on Smart Structure and Systems (ICSSS-17), Saveetha Engineering College, Chennai.

2016-2017

No	Name	Title of the Paper	Journal / Conference	Title of Journal / Conference, Year, Volume & Page Numbers.
1.	Dr.C. Gnana kousalya Dr.G. Rohini	Secured Transmission Of Data In Mobile Wireless Sensor Networks	Journal	International Journal of Advanced Engineering Technology, E-ISSN 0976-3945, 7(1) pp.822-826, 2016
2.	Dr.C. Gnanakousalya Dr.G. Rohini	Energy efficient geographical key management scheme for authentication in mobile wireless sensor networks	Journal	Wireless Networks, Springer, 1022-0039, 23, pp1479-1489,2016
3.	Ms.S.Gayathri, Mrs.A.Maria Christina Blessy, Mrs.P.Princy Magdaline	Realization of Efficient Curve-Based Crypto Processor on FPGA	Journal	International Journal of Emerging Technologies in Engineering Research, IJETER, ISSN: 2454-6410, 4 (7) pp.26-30, 2016
4.	Mrs.G.S.Annie Grace Vimala , Dr.S.Kaja Mohideen	An Efficient Approach for Detection of Exudates in Diabetic Retinopathy Images Using Clustering Algorithm	Journal	IOSR Journal of Computer Engineering (IOSRJCE), ISSN: 2278-0661, 2 (5), pp. 43-48

2015-2016

S No	Name	Title of the Paper	Journal / Conference	Title of Journal / Conference, Year, Volume & Page Numbers.
1.	Dr.C. Gnana kousalya G. Rohini, G. Brindha	Genetic Algorithm based Optimization of Single Node in Reformed-Digital Micro Fluidic Biochip	Journal	Indian Journal of Science and Technology, IJST, 0974-6846,8 (29) pp.1-8
2.	Dr.G. Rohin Bethanney Janney,, J. Pauline	Detection of malignancy of skin lesions based on local texture and fractal analysis	Journal	Research Journal of Pharmaceutical, Biological, and Chemical Sciences, 6(2) pp. 408-412,2015
3.	Mrs. N.R.Bhuvanewari Dr. Vasumathi Narayanan	A Survey on advancements in Feature Extraction using active learning for Image Classification	Journal	International Journal of Applied Engineering Research, 10 (66), pp. 424-430 , 2015

2014-2015

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1.	Dr. C.Gnana Kousalya, Dr.T.Sasilatha, M.Senthil Murugan	An Energy Efficient Key Management Scheme For Mobile Wireless Sensor Networks	Journal	International Journal of Advanced Technology in Engineering and Science, 2348 – 7550, 2 (7) pp.340-349,2014
2.	Mrs.G.S. Annie Grace Vimala Dr.S.Kaja Mohideen	An Economic System for Screening of Diabetic Retinopathy Using Fundus Images	Journal	Online Journal of Biological Sciences, 1608-4217,14(4) pp.254-260,2014

2012-2013

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1.	Mrs.G.S.Annie Grace Vimala , Dr.S.Kaja Mohideen	An Efficient Approach for Detection of Exudates in Diabetic Retinopathy Images Using Clustering Algorithm	Journal	IOSR Journal of Computer Engineering (IOSRJCE), ISSN: 2278-0661, 2(5), pp. 43-48