

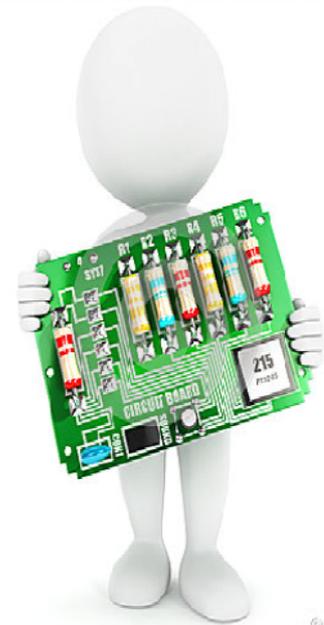


NEWSLETTER

July-December 2018

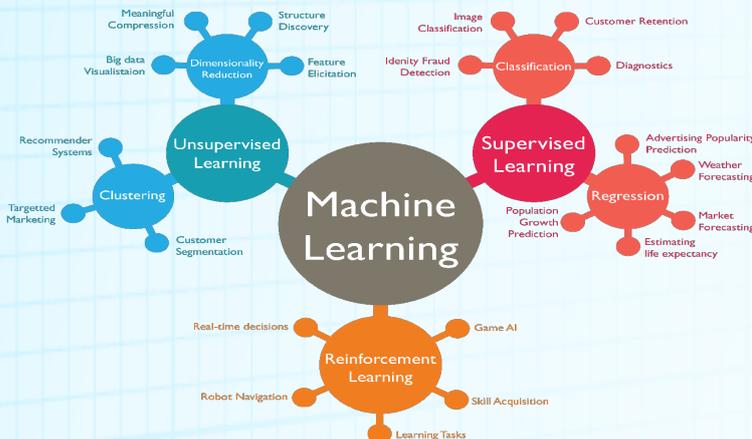
Vision

To create a centre for imparting technical education of international standards and conduct research at the cutting edge of electronics & communication technology to meet the current and future challenges of technological development.



Mission

o create technical manpower for meeting the current and future demands of industry and academia: to recognize education and research in close interaction with electronics & communication & related industry with emphasis on the development of leadership qualities in the young men and women entering the portals of the institute with sensitivity to social development and eye for opportunities for growth in the international perspective.



*Either write something worth reading
Or do something worth writing.*

-Benjamin Franklin

NOTABLE PUBLICATIONS

Harshul Balani, Ghanshyam Singh, Manish Tiwari, Vijay Janyani, Ashish Kumar Ghunawat, "Supercontinuum Generation at 1.55 μm in As₂S₃ Core Photonic Crystal Fiber", Applied Optics, <https://doi.org/10.1364/AO.57.003524> (SCI, IF: 1.65) Volume :57 / 3524-3533 / 2018

J. Ali, P. Youplao, N. Pornsuwancharoen, M.A. Jalil, M.S. Aziz, S. Chiangga, I.S. Amiri, S. Punthawanunt, G. Singh, P. Yupapin and K.T.V. Grattan, "Nano-capacitor-like Model using Light Trapping in Plasmonic Island Embedded Microring System", Results in Physics (SCI Journal) Volume :10 / 727-730 / 2018

Vimal Kumar Agrawal, Raju Patel, Dharmendar Boolchandani, Kamaljit Rangra, "Analytical Modeling, Simulation, and Fabrication of a MEMS Rectangular Paddle Piezo-Resistive Micro-Cantilever-Based Wind Speed Sensor", IEEE Sensors Journal (<https://doi.org/10.1109/JSEN.2018.2826040>), IF: 2.512, SCI Volume :18 / 7392 -7398 / 2018 ISBN: 1558-1748

Shubham Sharma and Tarun Varma, "UV Analysis of Bottom Gate Thin Film Transistor Using VisualCAD (Online Published on 2 November 2018)(print Version Will Be Published in February, 2019, as Volume 6 Number 2)", Materials Research Express Volume :6 / 1-7 / 2018 ISBN: ISSN 2053-1591

Vivek Raghuvanshi, Deepak Bharti, Ajay Kumar Mahato, Ishan Varun, and Shree Prakash Tiwari, "Semiconductor:Polymer Blend Ratio Dependent Performance and Stability in Low Voltage Flexible Organic Field-Effect Transistors", Synthetic Metals Volume :236 / 54-60 / 2018

Pichai Youplao, Nithiroth Pornsuwancharoen, Suksan Suwanarat, Khomyuth Chaiwong, Muhammad Arif Jalil, Iraj. S. Amiri, Jalil Ali, Ghanshyam Singh, Preecha Yupapin, Kenneth T.V. Grattan, "High-density WGM probes generated by a ChG ring resonator for high-density 3D imaging and applications", Microw Opt Technol Lett., Volume :60 / 2689-2693 / 2018 ISBN:

1098-2760

Rukhsar Zafar, Pooja Chauhan, Mohammad Salim, Ghanshyam Singh, "Metallic Slit-Loaded Ring Resonator-Based Plasmonic Demultiplexer with Large Crosstalk", Plasmonics, Springer Science, part of Springer Nature Volume :11 / 1-5 / 2018 ISBN: 1557-1963

Pancholi, Sidharth, and Amit M. Joshi, "Portable EMG Data Acquisition Module for Upper Limb Prosthesis Application", IEEE Sensors Journal (<https://doi.org/10.1109/JSEN.2018.2826040>), IF: 2.512, SCI Volume :18 / 3436-3443 / 2018

Soma Kumawat, M. Ravi Kumar, "Design of Variable Weight code for multimedia service in SAC-OCDMA systems", IET Optoelectronics Volume :12 / 56-64 / 2018

S. Chouhan, D. K. Panda, M. Gupta and S. Singhal, "Multiport MIMO antennas with mutual coupling reduction techniques for modern wireless transceive operations: A review", International Journal of RF and Microwave Computer-Aided Engineering Volume :28 / 1-13 / 2018

Hemant Sharma, K K Sharma, "ECG-derived respiration based on iterated Hilbert transform and Hilbert vibration decomposition", Australasian Physical & Engineering Sciences in Medicine Volume :41 / 429-443 / 2018

Gaurav Sharma, Lava Bhargava, "Novel and Robust Implementation of Register Abstraction on UVM Testbench", International Journal of Simulation Systems, Science & Technology Volume :19 / 1473-8031 / 2018 ISBN: ISSN 1473-804x

Deepender Kant, L M Joshi and V Janyani, "Design of a Multi beam Electron Gun for 352.2 MHz, 100 kW (CW) Power Klystron", Journal of Electromagnetic Waves and Applications Volume :32 / 306-318 / 2018 ISBN: ISSN:09205071

Zaineb Gharsallah, Monia Najjar, Bhuvneshwer Suthar, Vijay Janyani, "High sensitivity and ultra-compact optical biosensor for detection of UREA concentration", Optical and Quantum Electron Volume :50 / 249 / 2018 ISBN: ISSN:0306-8919

Workshops/Short Term Courses STCs/FDPs

Tarun Varma, C. Periasamy and Dharmendar Boolchandani , "Performance Evaluation of Bottom Gate ZnO Based Thin Film Transistors With Different W/L Ratios for UV Sensing" , Superlattices and Microstructures Volume :114 / 284-295 / 2018 ISBN: ISSN: 0749-6036

S. Singhal , "Octagonal Sierpinski Band Notched Super Wideband Antenna With Defected Ground Structure and Symmetrical Feeding" , Journal of Computational Electronics Volume :17 / 1071-1081 / 2018

Arathy Varghese, C. Periasamy, Lava Bhargava , "Analytical Modeling and Simulation Based Investigation of AlGaIn/AlIn/GaN Bio-HEMT Sensor for C-erbB-2 Detection" , IEEE sensor Volume :1 / 1-08 / 2018

Nidhi Saxena, K.K. Sharma , "Pansharping scheme using filtering in two dimensional discrete fractional Fourier transform" , IET Image Processing Volume :12 / 1013-1019 / 2018

Tarun Varma, C.Periasamy and D Boolchandani , "Performance evaluation of bottom gate ZnO based thin film transistors with different W/L ratios for UV sensing" , Superlattices and Microstructures Volume :1 / 1 / 2018

Sourabh Sahu, Jalil Ali, Preecha P. Yupapin, Ghanshyam Singh , "High-Q and temperature stable photonic biosensor based on grating waveguides" , Opt Quant Electron (SCI Journal) Volume :50 / 307 / 2018

Nabiha Jellali, Monia Najjar, Moez Ferchichi, Vijay Janyani , "Performance enhancement of the 3D OCDMA system by using dynamic cyclic shift and multi-diagonal codes" , Photonic Network Communications Volume :0 / 1 / 2018

Anton Bourdine , Vladimir Burdin, Vijay Janyani, Ashish Kumar Ghunawat, Ghanshyam Singh, Alexander Zhukov , "Design of Silica Multimode Optical Fibers with Extremely Enlarged Core Diameter for Laser-Based Multi-Gigabit Short-Range Optical Networks" , Photonics Volume :5 / 1-22 / 2018 ISBN: 2304-6732

National Short Term Course on Scientific Techniques & Computational Approaches at MNIT, Jaipur, India from 24-12-2018 to 28-12-2018

National Workshop on One Week Global NKN Winter Faculty Development Program on "Wireless and Mobile Communication" at Electronics and ICT Academy , MNIT , Jaipur, India from 03-12-2018 to 07-12-2018

National Short Term Course on "The 3rd STTP on MACHINE LEARNING" at NIT Raipur, Raipur, India from 29-10-2018 to 02-11-2018

National Short Term Course on FDP on Computational Techniques in Optics and Photonics at MNIT Jaipur, Jaipur, India from 20-08-2018 to 25-08-2018

National Short Term Course on E & ICT academy sponsored FDP on Computation Techniques in Optics and Photonics at MNIT Jaipur, JAIPUR, India from 20-08-2018 to 25-08-2018

National Short Term Course on Computation Techniques in Optics and Photonics at MNIT , JAIPUR, India from 20-08-2018 to 25-08-2018

Seminars/Conferences/Symposia organized

International Conference on International Conference on Intelligent Computing Techniques for Smart Energy Systems (ICTSES-2018) at Manipal University Jaipur, Jaipur, India from 22-12-2018 to 23-12-2018

PLACEMENT DATA:

Highest package offered to UG students was 32.5 LPA

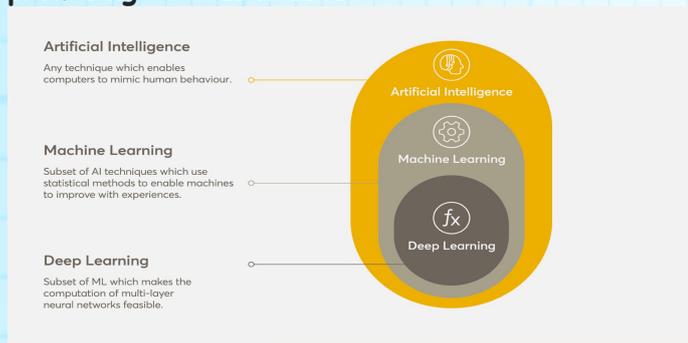
Highest package offered to PG students was 8 LPA.

Average package for UG students was 10 LPA.

Average package for PG students was 4.9 LPA

Machine Learning/AI

Artificial Intelligence (AI) has entered our daily lives like never before and we are yet to unravel the many other ways in which it could flourish. All tech giants such as Microsoft, Uber, Google, Facebook, Apple, Amazon, Oracle, Intel, IBM or Twitter are competing in the race to lead the market and acquire the most innovative and promising AI businesses.



Machine learning is a type of AI that facilitates a computer's ability to learn and essentially teach itself to evolve as it becomes exposed to new and ever-changing data.

For example, Facebook's news feed uses machine learning in an effort to personalize each individual's feed based on what they like. The main elements of traditional machine learning software are statistical analysis and predictive analysis used to spot patterns and find hidden insights based on observed data from previous computations without being programmed on where to look.

PHD Awarded:

SOMA KUMAWAT

2013REC9531

TOPIC: New constructions of optical codes, and analysis for SAC-OCDMA systems

NIDHI SAXENA

2014REC9027

TOPIC: New image fusion schemes using HVD, FRFT and GSP techniques.

SAPNA KHANDELWAL

2012REC9045

TOPIC: NBTI Aware Support Vector Machine based Surrogate Models for Analog Circuits

SANJAY KUMAR SINGH

2010REC206

TOPIC: Design and Performance Evaluation of Tuning Methods of PID Controller.

HEMANT KUMAR MEENA

2013REC9543

TOPIC: Some Studies on the facial expression recognition using the graph signal processing

RAJU PATEL

2014REC9545

TOPIC: Design, Fabrication and RF Characterization of a Film Bulk Acoustic Resonator

DEEPENDER KANT

2013REC9569

designed and edited by:

Lalit Agrawal

2018uec1778

2nd year, ECE, MNIT