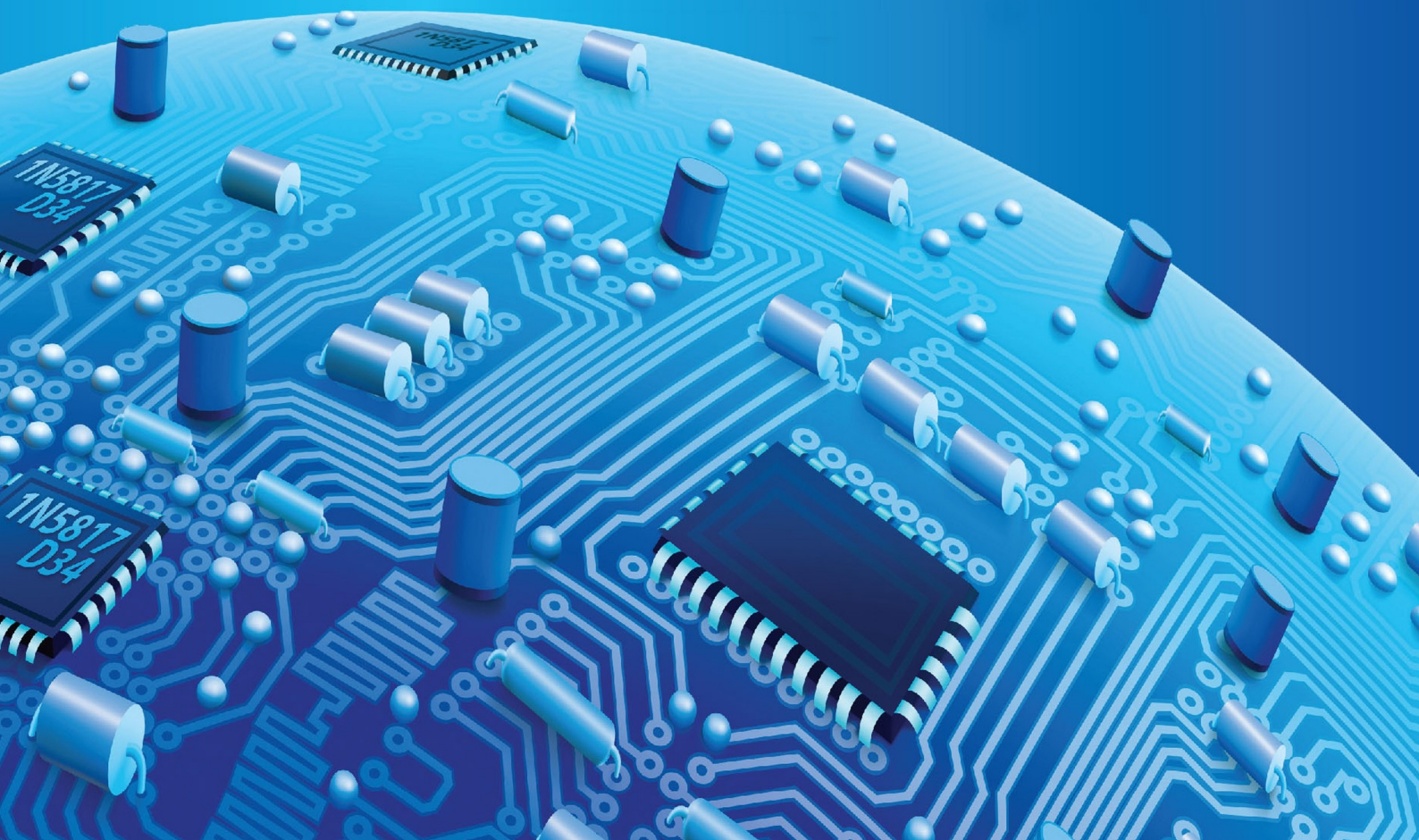




**SPIRO**  
SOLUTIONS PVT LTD

**COMMUNICATION  
PROJECT TITLE  
2016 - 2017**





## MATLAB - COMMUNICATION

### ORTHOGONAL FREQUENCY-DIVISION MULTIPLEXING(OFDM)

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM01	OFDM Signal Processing in Offset-QAM Based Filter Bank Multicarrier Systems	2016
2	ITCM02	Beamforming OFDM Performance under Joint Phase Noise and I/Q Imbalance	2016
3	ITCM03	Secure Communication in OFDMA Based Cognitive Radio Networks: An Incentivized Secondary Network Coexistence Approach	2016
4	ITCM04	OFDM receiver for fast time-varying channels using block-sparse Bayesian learning	2016
5	ITCM05	Low-Complexity Modem Design for GFDM	2016
7	ITCM06	Generalization of orthogonal frequency division multiplexing with index modulation	2015
6	ITCM07	PAPR analysis of class-iii SLM scheme based on variance Of correlation of alternative OFDM signal sequences	2015
8	ITCM08	Performance of reconfigurable antennas in a below-decks environment	2015

### COGNITIVE RADIO NETWORK(CRN)

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM09	Outage Performance of Cognitive Relay Networks with Wireless Information and Power Transfer	2016

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2	ITCM10	Dynamic Spectrum Leasing for Bi-Directional Communication: Impact of Selfishness	2016
3	ITCM11	Sniffer Channel Assignment with Imperfect Monitoring for Cognitive Radio Networks	2016
4	ITCM12	Low Complexity Energy Detection for Spectrum Sensing with Random Arrivals of Primary Users	2016
5	ITCM13	Improving Physical Layer Security for CRNs Using SINR-Based Cooperative Beamforming	2016
6	ITCM14	Relay-selection improves the security-reliability trade-off in cognitive radio systems	2015
7	ITCM15	On signal detection in the presence of weakly correlated noise over fading channels	2014
<b>MUTIPLE INPUT MUTIPLE OUTPUT(MIMO)</b>			
1	ITCM16	Performance Analysis of Dual-Hop MIMO AF Relaying Network with Multiple Interferences	2016
2	ITCM17	BER Analysis for Spatial Modulation in Multicast MIMO Systems	2016
3	ITCM18	Performance Evaluation of Best Path Selection in a Multi-Hop Decode-and-Forward Cooperative System	2016
3	ITCM19	New Results on Transceiver Design for Two-hop Amplify-and- forward MIMO Relay Systems with Direct Link	2016
4	ITCM20	Energy-Efficient Hybrid Analog and Digital Precoding for MmWave MIMO Systems with Large Antenna Arrays	2016
5	ITCM21	MIMO-OTH Radar: Signal Model for Arbitrary Placement and Signals With Non-Point Targets	2015

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6	ITCM22	Linear pre coding for MIMO with LDPC coding and reduced complexity	2015
7	ITCM23	On the Sum-rate the Gaussian MIMO Z channel and the Gaussian MIMO x channel	2015
8	ITCM24	Low Cost Pre-Coder Design for MIMOAF Two-Way Relay Channel	2015

## WIRELESS OPTICAL COMMUNICATION

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM25	On the Capacity of the Intensity-Modulation Direct-Detection Optical Broadcast Channel	2016
2	ITCM26	Impact of Inter-Relay Cooperation on the Performance of FSO Systems with any Number of Relays	2016
3	ITCM27	Performance of Wireless Optical Communication In S-Distributed Turbulence	2016

## SATELLITE COMMUNICATION

S.NO	PROJECT CODE	PROJECT TITLES	YEAR
1	ITCM28	Two-Way Satellite Relaying with Estimated Channel Gains	2016
2	ITCM29	A Novel Beamforming and Combining Scheme for Two-Way AF Satellite Systems	2016
3	ITCM30	Channel Estimation and Detection in SatelliteCommunication Systems	2016

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## Education Partners:



## Technologies and Domain used:

IEEE 2016, Java, J2ee, Android, Dot net, PHP, Embedded, Vlsi, Matlab, VB, Net working, Data Mining, Image Processing, Cloud Computing, Mobile Computing, Multimedia, Network Security, Soft Engg, Grid Computing, Automation, Robotics, Communication, RF, Zigbee, Blue tooth, GSM/GPS/GPRS, Power Electronics & Systems, Electrical, DSP, RTOS, Bio metrics, etc.

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