

Editorial Note

I feel immense pleasure to present before you another issue of “New Horizons” Journal of the Institution of Electrical and Electronics Engineers Pakistan. Continuing the tradition of disseminating latest technical knowledge, IEEEEP journal has covered emerging topics and novel aspects of technology, application and service development within the multidisciplinary framework of Electrical, Electronics, Computer, and Telecommunication Engineering. In this issue total 10 research papers are included covering diverse fields.

In 1st paper, considering the important of Hybrid Power System, Fuzzy Logic Controller based control scheme is proposed and Frequency Shift Key based power line communication scheme is tested over proposed hybrid power system.

In 2nd article the major challenges of Economic Dispatch are reviewed i.e. planning, evaluation of demand, weather forecasting and security constrains, existing algorithms, unit commitment and reduction in carbon emissions. The proposed system is verified over IEEE 30-bus bar and six generators along with wind and solar units considered as non-schedulable.

In next paper, linear stability analysis of harmonic oscillator in the domain of superconductivity is carried out to determine the stability of fixed points in a circuit to visualize the qualitative analysis of resonance frequency when an LC circuit is operated from an external supply.

In fourth paper, using image processing techniques, the faults in PV arrays are investigated and a mathematical modelling framework is proposed to correctly determine a faulty cell within a PV module.

The next paper demonstrates the generation of multiple signals due to nonlinearities between two or more wavelengths interacting with each other. It is concluded that WDM via FWM offers less BER compare to WDM system via XPM.

In sixth paper, VPN is deployed between virtual cloud and physical IoT devices to obtain faster communication with security allowing transferring of data proficiently and safely. Moreover, L2TP technology is used to achieve VPN connectivity with two phase authentication and encryption of data, which results as a secure and fast tunnel for data transfer minimizing time from 240ms to 140ms.

In next paper, the power saving requirement for IoT devices LTE, LTE-A is used to turn off receptions and go to sleep when no data need to be received or transmitted. This guarantees the Quality of Services.

The paper titled as “Social Network YouTube a Source of Earning” explores the online money earning opportunities like Freelancing, Affiliate marketing, Blogging and Youtubing.

The ninth paper Analysis the world’s top YouTube Channels in 2017.

In final paper to secure the future of digital banking in Pakistan, the concept of ATM PIN verification via Smartphones is proposed.

In the end, I am extremely grateful to the National advisory board of experts and paper review experts for their valuable input to improve the quality of journal. In this issue four volumes have been merged together as vol. 97 to vol.100.

Finally, On behalf of IEEEEP journal management committee, I welcome the submission for the upcoming issue and look forward to receive your valuable feedback.

The Chief Editor
Engr. Prof. Dr. Bhawani Shankar Chowdhry