Academic Year: 2020-21

Best Projects

1. S.No.	Name of the Project	Description
1	PV AND BATTERY OPERATED HIGH SPEED ELECTRIC VEHICLE WITH BLDC MOTOR CONTROL.	The speed is controlled through a variable DC link voltage of VSI. An appropriate control of CUK converter through the incremental conductance maximum power point tracking (INC-MPPT) algorithm offers soft starting of the BLDC motor. The proposed water pumping system is designed and modeled such that the performance is not affected under dynamic conditions. In the advanced Proposed prototype, pulses to the BLDC Device circuit can be triggered and varied by IoT Modem. The IoT pulses can be varied from anywhere to have a smart applications. The suitability of proposed system at practical operating conditions is demonstrated through simulation results using MATLAB/ Simulink followed by an experimental validation.
2	Wireless Power Transfer of High-Speed Electric vehicle.	Wireless power transfer (WPT) using magnetic resonance is the technology which could set human free from the annoying wires. WPT technology is developing rapidly in recent years. At kilowatts power level, the transfer distance increases from several millimeters to several hundred millimeters with a grid to load efficiency above 90%. The advances make the WPT very attractive to the electric vehicle (EV) charging applications in both stationary and dynamic charging scenarios.
3	Control Of UPQC Based on Steady State Linear Kalman Filter For Compensation of Power Quality Problems	Custom power devices by Dual Unified Power Quality Conditioner (IUPQC). In I UPQC there is no need of coordinate transformation this reduces the complex calculation. This work describes the techniques of correcting the power quality problems in the distributed system. The proposed system can able to compensate the nonlinear load condition and also ensure the sinusoidal voltage for the load in all three phases. This results in the better power quality

4	An Adaptive Fuzzy Logic Control Strategy for Performance Enhancement of a Grid-Connected PMSG-Based Wind Turbine.	The system consists of a wind turbine, a three-phase IGBT based rectifier on the generator side and a three-phase IGBT based inverter on the grid side converter system.The pitch angle control by perturbation and observation (P&O) algorithm for obtaining maximum power point tracking (MPPT). MPPT is most effective under, cold weather, cloudy or hazy days. A designed control technique is proposed for the MPPT mechanism of the system. This paper will explore in detail about the control analysis for both the generator and grid side converter system. Further, it will also discuss about the pitch angle control for the wind turbine in order to obtain maximum power for the complete wind energy generation system.