

## ELECTRICAL DRAFTER/DESIGNER

### Summary

Dedicated, Highly skilled and dynamic Entry Level Electrical Engineer with a great work ethic and engineering research background. Strong multitasker able to handle simultaneous electrical design and repair tasks with full accuracy and efficiency.

### Skills

C, C++, MATLAB, Visual Basics, Python, Verilog, VHDL, JAVA, JavaScript, HTML, CSS Comsol, AutoCAD, MAGIC, LTSpice, ModelSim, Quartus II, Nois II, POWERWORDSIMULATOR, NETWORKING and CheckPoint, SALESFORCE (ADMIN)

### Accomplishments

- EMBEDDED SYSTEMS - Auto-Scaled Low-Frequency Counter, Aug 2015.
- Devised using VHDL based on Finite State Machine using Multisim and Quartus II and simulated on Altera's Cyclone DE1 board for FPGA VHDL - Logical Expression Cell, Dec 2015.
- Designed and modeled the circuit to get transistor level layout and obtained electrical parameters for the circuit.
- VLSI - 6 Transistor SRAM, Dec 2014.
- Designed and modulated a 6 transistor SRAM, with power analysis and power dissipation which varies with foundry technology and number of transistors.
- Schematic design was also simulated.
- CONTROLS - ANFIS Based Neuro-Fuzzy Controller in LFC Wind-Micro Hydro-Diesel Hybrid Power System, May 2015.
- Devised a PID controller has frequency deviation, power deviation and maintains system reliability, as well as protection relays and applications using PLM Design.
- Effective Utilization of Solar Energy by Intermediate Stabilization of Control Voltage-BITS competition for Tech Projects, May 2012.
- Designed & developed an intermediate stabilization circuit of buck boost converter using Solar panels for testing and harnessing Solar Energy which was stored in SMF battery using ANSI standards and IEC standards.
- Design of State Feedback Control System with Specific Application, May 2014.
- Designed a Ward-Leonard model with a thyristor in its armature field winding.
- By fluctuating firing angle made system non-linear and verified if the system is still controllable and observable.
- Used RC circuit for firing angle variation by using switchgears such as voltage (AIS and GIS) and LV.
- WIRELESS NETWORK - Software Defined Radio Based Implementation of RFID (Radio Frequency Identification) Tag in Next Generation Mobiles, May 2016.
- Applied the RFID to SDR to activate the backscattering tag technology Which significantly improves tag reading range and confidence.
- The Gen2 defines the physical and logical requirements for a passive-backscatter.
- Dynamic and Digital Signal Processing (DDSP) - Digital DCM Detection and Mixed Conduction Mode Control for Boost PFC Converters, Dec 2014.
- It is a novel mixed conduction mode to realize total harmonic distortion and power factor correction converters in both continues conduction mode and DCM using a single ac line half cycle.
- The integrators found on many DSPS and simplification and cost reductions over many methods are possible.
- The output power of 98 W and 650 W boost PFC Converter is operated in MCM controlled and power factor improvement of 1.5% and conventional digital converter.

### Experience

Electrical drafter/designer , 02/2017 to Current St. Luke's Health System ¼ Hailey , ID

- wiring connection specifications or cross-sections of underground cables, as required for instructions to installation crew.
- Draw master sketches to scale showing relation of proposed installations to existing facilities and exact specifications and dimensions.
- Measure factors that affect installation and arrangement of equipment, such as distances to be spanned by wire and cable.
- Write technical reports and draw charts that display statistics and data.

Library Tech Assistant , 01/2014 to 05/2014 BITS ¼ City

- Helped and code computerized software for easy access of the files in the database.
- Maintain and troubleshoot problems with library equipment.
- Design, customize and maintain databases, web pages, and local area network.

Intern , 06/2012 to 08/2012 ETA STAR PORTAL LLC

- Analyze data gathered and develop solutions or alternative methods of proceeding.
- Develop, present or respond to proposals for specific customer requirements, including request for proposal responses and industry specific solution.
- Led a 9-membered team for a Direct Marketing drive, focused on Contract Management, Supplier Relationship Management and Online Bidding Analysis Our team bagged a major client after contacting 400 clients.

### Education and Training

Master of Science : Electrical Engineering , 2016 Texas A & M University ¼ City , State 3.58/4.0 Electrical Engineering

Bachelor of Science : Electrical and Electronics Engineering , 2014 Birla Institute of Science and Technology ¼ City , UAE 3.70/4.0 Electrical and Electronics Engineering

### Publications

Micro-Sensors for Water Quality Assessment: A Review - International Conference on "Emerging Technologies from Micro to Nano", organized by BITS and CEERI Pilani, Rajasthan, India 2013 \*For comprehensive design of sensors for total analysis of water contaminants - use of single microsystem for the detection of multiple contaminants which would provide efficient and complete analysis of water samples.

#### Skills

AutoCAD, C, C++, cables, cable, charts, Contract Management, Draw, CSS, client, clients, databases, database, dimensions, Direct Marketing, HTML, JAVA, JavaScript, local area network, MAGIC, MATLAB, access, NETWORKING, PROGRAMMING, proposals, proposal, Python, Relationship Management, SIMULATION, statistics, troubleshoot, Verilog, VHDL, Visual Basics, web pages, wiring