MANPREET KAUR

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Highly skilled and resourceful Entry Level Electrical Engineer with a superb work ethic and engineering research background. Adept at explaining extremely complex engineering principles and procedures to a wide variety of professional and non-professional audiences. Strong multitasker able to handle simultaneous electrical design and repair tasks with full accuracy and efficiency.

Education:

- **Electrical Engineering Technology (Co-op)** **2016-2018**
  (Niagara College, Welland, ON)
  - Have achieved 90 GPA.
  - On President's Honour Roll for three consecutive academic terms
  - On Niagara Scholar Award in the last term

- **Bachelor of Science** **2010-2013**
  (Khalsa College, Ludhiana, Punjab)
  - Studied Physics, Chemistry and Mathematics.
  - Had achieved 80 GPA.

Overview of Skills and Knowledge Acquired through Education:

- **Electronic and Electrical Instrumentation:**
  - Interpret the schematic drawings and did calculations for a given circuits.
  - Used Multisim to simulate the circuits before building.
  - Used active and passive electronic components to build the circuits on the breadboard.
  - Performed electrical testing using laboratory instruments such as digital multimeter (DMM), function generator and oscilloscope.
  - Knowledge of DC and AC.

- **Power Quality and System Analysis:**
  - Understood how common non-linear loads generate harmonics.
  - Learned the effects of harmonic currents on power system transformers, phase and neutral conductors, and inductors. Calculate, interpret, and control harmonics with K factor transformers.
  - Good understanding of various industrial power electronic topologies using SCRs, GTOs, and IGBTs in power transmission, cycloconverters, AC and DC motor drives, and rectifiers.
  - Knowledge of a wide variety of IEEE designated power system protection devices.
  - Develop positive, negative and zero sequence phasors, equations, and impedance networks for utilities, transformers, transmission lines, and motors.
  - Knowledge of WYE and DELTA three-phase systems and interpret the three-phase voltage and current phasors.
  - Interpret the inductive and capacitive load; and their affect on power factor and knowledge to correct the power factor of the system.

- **Operational Amplifier(OP-AMP):**
  - Knowledge of basic principles of ideal and non-ideal OP-AMP.
  - Learned about different types of OP-AMPs.
  - Used Microchip software to design the OP-AMP filters (low-pass, high-pass, notch and band-pass).
  - Interpret and troubleshoot the circuits of OP-AMPs using X-Y plots.

- **Electrical Machines Dynamics:**
  - Confident with the use of PLC.
  - Knowledge of hydraulic, pneumatic, and electrical systems and control.
  - Basic knowledge to Robotics Automotive.

- **Canadian Electrical Code Book:**
  - Confident with the use of Electrical Code Book.
  - Knowledge of doing basic calculations like size of conductor, distance of conductors from panel, service entrance-single and multiple dwellings.
  - Knowledge to read electrical schematics and single line drawings.

- **AUTO-CAD:**
  - Extensive knowledge of AUTO-CAD.
  - Drew electrical circuits using appropriate scale.
  - Ability to prepare detailed electrical schematics.

- **Digital Systems:**
  - Used Altera Board to create code for VHDL projects.
  - Used MPLAB to code for hardware timers, time delays and digital displays.

- **Electronic Fabrication:**
  - Used through hole, SMT and stencil soldering techniques to fabricate circuit board projects.
  - Knowledge to create bill of materials (BOM).

- **Microsoft Office:**
  - Used word with images and different charts to create technical reports.
  - Used excel to create graphs for lab reports.
  - Used PowerPoint to create presentations.
- Completed Health and Safety Awareness and got certificate.

Work Experience:

- **Technical Support Associate (Quality/R&D)** **2017-2018**
  (PL Light Systems, Beamsville, ON)
  - Assembled and tests experimental electronic ballasts and other electrical equipment and components according to engineering data and knowledge of electrical principles.

- Diagnosed the cause of electrical or mechanical malfunction or failure of operational equipment and performs preventative and corrective maintenance
- Plans, directs, and records periodic electrical testing, and modification or replacement of equipment which fails to meet acceptable operating standards.
- Created light plans with different softwares like Relux, Dialux.
- Designed the company's Labels for the by using LabelView software.
- Learned to create new BOMs and change in existing BOMs.

- **Peer Tutoring** **2016-2017**

  (Niagara College, Welland, ON)
  - Selected to assist students with electrical courses.
  - Helped them in their assignments problems.
  - Helped through labs and creating lab reports.

- **Cashier/Server** **2016**

  (Sher-E-Punjab Restaurant, Niagara Falls, ON)
  - Communicated menu information to customers from variety of countries; and gave suggestion to them.
  - Calculated and balanced cash to receipts and made deposits up to $5000 at the end of the day.

References upon Request