Contact

www.linkedin.com/in/sushrut-bawkar-a6672a170 (LinkedIn)

Top Skills

Electrical Panel Design
Cable design
EPLAN

Certifications

German Level A2
Goethe Zertifikat A1
Mechatronics- PLC based Automation and SCADA
Solidworks CAD Expert
Lean Six Sigma Green Belt (ICGB)

Sushrut Bawkar

Electrical Engineer at Impression Systems & Engineers
Pune, Maharashtra, India

Summary

Control Engineer with 3+ years of training and experience in manufacturing and automation industries. Presently working in controls system design using EPLAN for SPMs and material handling systems (conveyors, cranes, turn tables & rail guided vehicles), PLC coding, handshaking between multiple production lines using DC signals and ProfiNet RIO, project management and customer interaction to leverage turnkey solutions for multi-national corporations.

Certified Lean Six Sigma Green belt from Quality and Qualifications Ireland. Ongoing experience in material handling automation. Interested in a career progress in industrial automation and design (EPLAN, developing control logic, handshaking, turn key solutions and on-site execution).

Experience

HCLTech
Electrical Engineer
October 2022 - Present (11 months)
Bengaluru, Karnataka, India

Electrical schematics

IMPRESSION SYSTEMS AND ENGINEERS PRIVATE LIMITED
Control Engineer
August 2021 - September 2022 (1 year 2 months)
Pune, Maharashtra, India

- PLC ladder logic-SIEMENS SIMATIC S7 (1200 & 1500)
- EPLAN electric drawings.
- Preparing handshaking design.
- IO listing, cable scheduling & sensor placement.
- Control panel and site bill of materials.
- Authoring technical and operational manuals.

Ambionics

PLC Automation Engineer

June 2020 - July 2021 (1 year 2 months)

Pune, Maharashtra, India

• Designing concept and as-built CAD for PLC and power distribution control panel layouts using AutoCAD 2D.
• Component selection for DOL & S/D feeders using Siemens Type-2 coordination.
• On-site HMI commissioning. Authoring project analysis reports.
• Programming Allen Bradley Micrologix PLCs for industrial automation solutions.
• Programming Allen Bradley HMI via Connected Components Workbench for AB PanelView HMIs (Ethernet, DF1 and DH485 protocol).
• Authoring project analysis reports.
• Maintaining on-site documentation and authoring visit reports.

Giga Enerlogic India Pvt. Ltd

Six Sigma Implementation Intern

January 2020 - February 2020 (2 months)

Pune Area, India

This is my experience related to applying lean six sigma techniques for achieving my lean green belt certification.

Project: Implementing automated inventory management system for production department by using Apache POI Java API.

Activities performed in detail:

• Creation of project development timeline.
• Root cause analysis of production problems
• Drafted process flow map for production planning (current state).
• Improved the execution of overall process by performing Value Stream Mapping (creation of future state maps).
• Identified performance metrics by analyzing process parameters.
• Improvement using application of lean tools such as 5S, Just In Time, Standardized Work, PDCA.
• Designed and implemented inventory auto-replenish software by using Apache POI Java API.

Logitech

Research Student
October 2018 - September 2019 (1 year)
County Cork, Ireland

Performed Masters degree project in Logitech Ireland Services Ltd. Project titled "Structural design and optimization of a computer peripheral product towards improving its acoustic quality by modifying the design parameters."

Activities performed / skills acquired (in detail):

•Identified opportunities for UX quality improvement on a computer peripheral.

•Performing acoustic data capture from computer peripherals and constructing algorithms in
Mathworks MATLAB to process it through time domain and frequency domain to analyse the spectral content.

• Performing structural modifications and fixtures to computer peripherals by making CAD entities
using Dassault Systems Solidworks 2019 for laser equipped 3D printing.

• Constructing UX Surveys for user feedback followed by analysis.

• Performing thorough risk assessments for experiments designed and implementing respective
countermeasures for each risk under Occupational Safety and Health Administration for increasing overall safety grade of experiments.

Nano Power Engineering Co.
Project Engineering Intern
August 2017 - August 2018 (1 year 1 month)
Pune Area, India

My position in this company was of a full time Project Intern for developing projects based on 8051 micrcontroller (AT98S52 and AT89C51RD2). I was handling the responsibility of programming the 8051 microcontroller and interfacing various application based devices to the microcontroller for their smooth functioning.

Supervisor:

Mr. Suresh Vasant Ubhe (Director, Giga Enerlogic India Pvt. Ltd | Former CEO, Nano Power Engineering Co.)

The main activities performed and skills learnt in this internship were:

• Learning the hardware of 8051 microcontrollers and the subsequent instructions for assembly level
programming.

• Product technical datasheet analysis and interpretation.

• Interfacing 12V DC Solenoid coil, infrared proximity sensor, optical liquid level level sensor to 89C51RD2 microcontroller.

• Implementation of relay operation of 12 V DC Submersible water pump using Proximity switch interfaced to AT89S52 microcontroller.

• Interfacing and operation of TEAC Stepper Motor to AT89S52 microcontroller using DRV8825 stepper motor driver.

• Learning and implementing lean management techniques such as structured problem solving.

• Utilizing project management tools such as visual controls in order to achieve time based targets (live project status tracking).

• Learning and implementing data driven justification techniques for purchasing equipment for
projects.

Indpro Electronic Systems India Pvt. Ltd.

Summer Intern

June 2016 - July 2016 (2 months)

Pune Area, India

I was working as a summer intern in this company for 1 month after my completion of third year of my bachelor's degree. I was assigned with different real life automation problems to solve using Siemens Logo Soft Comfort (V7). Ladder logics were written for Siemens LOGO 8.2 Logic Module.

The various activities performed / skills learnt during this internship were:

• Constructing simple PLC ladder logic circuits for Siemens LOGO PLC.

• Learning and implementing various functionalities of Siemens LOGO Soft Comfort V7.

• Achieving time based tasks, building a 'can do' attitude.

• Learning about tagging of I/Os to a certain PLC controller by using controller datasheet.

• Learning and implementing timers and counters in ladder logic.

Project #1: Developing ladder logic for 3 levels elevator.

Project #2: Implementing elevator access control for project #1.

Project #3: Developing ladder logic for traffic light control systems.

Project #4: Developing ladder logic for motor sequencing.

Project #5: Final Internship Project [Complete automation of Plastic Injection Moulding Machine]

Education

University College Cork

Master of Engineering - MEng, Manufacturing and Automation · (2018 - 2019)

Savitribai Phule Pune University

Bachelor of Engineering - BE · (2013 - 2017)