NATARAJ ASHOK MUNOLI

#38 'Girija' 1st stage, 5th cross,
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PROFESSIONAL EXPERIENCE

Associate Equipment Engineer   06/2018-12/2018
Tesla, Inc. – Gigafactory 1, Sparks, NV, USA.
Supported production and implemented process changes through PLC program changes to improve the OEE of the conveyance system (Common components, internally and externally sourced including, but not limited to Allen Bradley, Fanuc, Keyence, and Cognex) and make it more robust.

- Ignition (HMI) improvement roll-outs integrated with PLC to help troubleshoot issues quicker and make the HMI more user-friendly
- Created SQL queries to proactively learn the system performance, attack the issues, and roll out fixes before the issue made a major impact on the production and helped drive the uptime initiative projects.
- Helped with implementation of new processes which integrated multiple aspects of industrial automation including Fanuc and Allen Bradley.
- Acted as a point of contact for in depth troubleshooting of various custom equipment.

Inside Sales Associate Intern   09/2017-05/2018
Microfinish Valves, Houston, TX, USA.
Managed inventory by tracking and testing the incoming valves from the manufacturing facility. Helped to manage and keep-up with increased inquiry and sales by producing professional quotations using systems tools and templates through QuickBooks, and managed Customer orders thru shipment.

Design Engineer Intern   02/2014-04/2014
Microfinish Valves, Hubli, India.
Actively engaged in a cross functional team to review and select designs of existing valve operating systems. Designed different valve components using AutoCAD.

Design Engineer Intern   08/2013-01/2014
SRV Automations, Hubli, India.
Successfully developed and tested hydraulic components complying with the constraints of limited tank capacity, washer size and water jet power for a washing machine unit for Caterpillar engine blocks. Used the actual engine block to map and place the water jets for best possible cleaning.

PROJECTS

MUNICH (MUNoli Innovation Center Hubli - www.i-Invent.org/munich)   03/2019-Present
Heading the MUNICH initiative to develop an innovative train of thought in the next generation. MUNICH is focused on innovating a curriculum ingraining automation, robotics and AI projects in the current curriculum.

Candy Manufacturing Cell (STEM Education)-RIT SME Chapter   08/2015-05/2016
Took up the role and responsibility of designing components and cell layout, and machined components for a prototype chocolate manufacturing cell. Worked with local STEM school teachers to develop a curriculum around the cell to help aid students understanding STEM concepts.

S'mores 2.0-Undergraduate Capstone   08/2015-05/2016
Assisted the manufacturing engineering students' undergraduate capstone project (Automated S'mores Cell) with planning and integrating work cells with PLC (Rockwell Automation) and FANUC 200iC robot.

EDUCATION

MS, Mechanical & Manufacturing Systems Integration　　　2014 -2017
Specialization - Manufacturing Automation　　　GPA: 3.18/4
Rochester Institute of Technology, Rochester NY

BS, Mechanical Engineering　　　2009 - 2013
B.V.B College of Engineering & Technology, India　　　GPA: 7.7/10

THESIS

3D Hybrid Model for New Product Development

Proposed a new model for New Product Development process that employs iterative approach to facilitate innovative approach and risk management. Addresses and aids NPD procedures, such as understanding needs and technical requirements better, cost control and scheduling activities, testing and validation, cross functional approach and decision making. Initial survey of the model resulted in >65% approval.

SOFTWARE SKILLS

- PLC Ladder Logic Programming - Rockwell Automation
- Robot Programming (Karel and V+)
- AutoCAD
- Python
- Ignition
- MS Office
- SQL
- Solidworks
- CNC Programming
- Minitab

TECHNICAL SKILLS

- Lean Six Sigma
- Six Sigma
- DFX
- FMEA
- New Product Development
- Design of Experiments (DOE)
- Improvement (DMAIC)
- Project Management
- Lean Manufacturing (Kaizen, Kanban, 5S, Takt Time)
- Statistical Analysis (Hypothesis testing & ANOVA)
- Reading drawings and GD&T