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Reema Carolene Ronald Rodrigues

LinkedIn Github
Portfolio

SUMMARY

Goal-oriented Electrical Engineer with an aim to work in a challenging organization that gives me an opportunity to enhance my skills and knowledge in line with the latest trend and work within a team focusing towards the growth of the organization.

EDUCATION

The University of Texas at Arlington, Texas, USA | MS – Electrical Engineering **August 2018 - May 2020**
Courses – System Identification and Estimation, Optimal Controls, Linear and Non-Linear Systems, Distributed Control Systems, Microprocessors

Don Bosco Institute of Technology, Mumbai, India | B.E. – Electronics & Telecommunication Engineering **August 2013 - May 2017**
Courses – Control Systems, Circuit and Transmission Lines, Signal & Systems, VLSI, Linear Integrated Circuits, Wireless Communication

TECHNICAL SKILLS AND CERTIFICATIONS

- Languages – C, Python (Basics), Ladder Logic, Visual Basic.
- Software – MATLAB, Simulink, Arduino IDE, Factory I/O, RSLogix 500, RSLogix 5000, RSLinx Classic, Automation Builder, Wonderware, Microsoft Word, Excel, PowerPoint
- Controllers – MCP2515, CAN Bus Shield, ARDUINO MEGA 2560, 80386DX microprocessor
- Certifications – PLC, HMI, SCADA, OMRON, Allen Bradley, Rockwell Automation, VFD, Lean Six Sigma (White Belt), AutoCAD Electrical(Basics)
- PLCs – OMRON CP1, Allen Bradley MicroLogix 1000, Allen Bradley MicroLogix 1400, Siemens S7-200 **,** Delta DVP-14SS, 480Vac 3 phase electrical circuits (Basics)

EXPERIENCE

Web Solution Specialist – Endurance International Group, Maharashtra, India **July 2017 to June 2018**

- Working with Linux/Windows Operating Systems/Hardware/ Software.
- Configuring and troubleshooting mail clients using **IMAP/POP/SMTP**.
- Working with domain names, domain name registration, Web and email server and hosting, **cPanel/Plesk** and troubleshooting client issues and helping clients with Simple Database functions like **Backup/Restore**.

ACADEMIC PROJECTS

Pump Control with Dual Bit Alarm System – [Allen Bradley MicroLogix 1400 Controller, Wonderware] **March 2020 to May 2020**

- Developed a system to check water level in a tank using analog level detectors and produced alarms and notifications when the level low or high and performed tank filling or drainage using a Pump or a Valve, respectively.
- Ladder Logic was used for programming in **RSLogix 500** and was linked with Allen Bradley MicroLogix 1400 controller using **RSLinx Classic**. The program was verified in **RSLogix Emulate 500** and then on the controller**.**

Box Batching and Sorting – [Allen Bradley MicroLogix 1400 Controller] **January 2020 to March 2020**

- Developed batches of colours using **Factory I/O** and the **ladder logic** using **RSLogix 500** and **RSLinx Classic** for different colour dosages made out from Red, Green and Blue colours. The dosages batched in boxes were sent for sorting based on height post which were sent to their respective repositories using an alternate logic from the rotating table. These boxes were then counted, and final packaging is done.

SDRAM Controller Design – [80386DX processor] **January 2019 to May 2019**

- Designed an SDRAM controller that allows SDRAM memory to be interfaced with 80386DX microprocessor having only asynchronous memory support.
- Solution was achieved along with state machine, row, column and bank signal generation, data masking, data flow, read write logic and refresh support. Auto refresh commands at a rate sufficient to ensure memory integrity was designed.

Consensus Analysis for Multi-Agent Systems – [MATLAB, SIMULINK] **August 2018 to November 2018**

- Analysed consensus and coordination of multi-agent systems and show the results obtained using simulation.
- Stimulated the system to obtain consensus for formation control.
- Analysis was done on both discrete time and continuous time topologies.

Event Data Recorder for monitoring and post-crash investigation purposes – [ARDUINO MEGA] **Aug 2016 to May 2017**

- Developed a prototype of Black Box for getting the internal information of the vehicle with the help of **CAN-BUS Shield (MCP2515 controller)**, for example, checking of Vehicle Speed, Engine RPM, Engine Temperature and Throttle position using **HC-SR04 Ultrasonic Sensor, SIM808 GSM/GPRS+GNSS**..
- The prototype can be used as a plug in and use device using **OBD 2 to DB9 connector** by any automobile manufacturer which will be able to read data from the vehicle and send it across the remote user.