

Electrical Engineer

James Taylor

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000-000-0000
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Summary

- Possessing a deep understanding of circuit analysis, programming experience in several computer languages, hands-on hardware proficiency of implementation, knowledge of communication protocols, such as I2C, SPI, and UART.
- Proficient in architecting software for embedded systems using LabVIEW.
- Highly knowledgeable in the physical operation and programmability of PLCs and SCADA systems.
- Holding expertise in the diagnosis, analysis, and successful troubleshooting of myriad technologies.

Skills

- **C, C++:** Knowledge of basic programming language C, C++.
- **MATLAB 2013:** Knowledge of a circuit implementation on Simulink.
- **Microsoft Office:** Have a grip on Microsoft Word, Excel, PowerPoint.
- **Proteus 8.0:** Complete implementation and execution of an electrical circuit.

Software Skills

- | | |
|------------|--------------------|
| • Linux | • RSLogix |
| • OrCAD | • GEMstudio |
| • Altium | • VirtualBox |
| • PSpice | • Unity Pro XL |
| • Electric | • Visual Studio |
| • LTSpice | • Windows OS |
| • Hyper-V | • Wonderware |
| • VMware | • Microsoft Office |
| • Quartus | • ISE Design Suite |

Programming Languages

- | | |
|---------|----------------|
| • R | • Python |
| • C | • Verilog |
| • C# | • Arduino |
| • C++ | • MATLAB |
| • SQL | • LabVIEW |
| • Julia | • Ladder Logic |
| • VHDL | |

Interests

- Movies
- Badminton
- Reading Articles

Work Experience

Electrical Engineer (Hardware and Software Development)

2015-05 - Present

E.ON.

- Developing diagnostic software and testing procedures for Laser Doppler Velocimetry.
- Performing debugging and failure analysis of fiber optical products from multiple manufacturers.
- Prototyping instruments used in experiments containing Micro Electro Mechanical Systems (MEMS) Matrix Optical Switches, Erbium-doped Fiber Amplifiers (EDFA), Dense Wavelength Division Multiplexing (DWDM), Optical Switch Circulators, Beam Splitters, Optical Attenuators, Nanosecond Pulsed Laser Diodes, and Tunable Lasers.
- Facilitating research for alternative software architecture used in embedded systems.
- Utilizing LabVIEW and other programming languages to develop complete solutions for the automation of diagnostic software for optical and electrical components.
- Collaborating with a National Laboratory to review and suggest best practices for control system software development used for Broadland Laser Ranging Systems.
- Creating HMI and automating procedures with Programmable Logic Controllers (PLC) and Supervisory Control and Data Acquisition (SCADA) systems for Shock Physics Experiments that require highly accurate timing and firing.

Assistant Electrical Engineer

2010-05 - 2015-04

Iberdrola

- Worked on electrical equipment (temperature and pressure sensors, valves, the actuator (ASAC 70), etc) on these engines.
- Worked on relays, contactors, MCCB breakers, performed tests for motor proper working.
- Completely familiar with the governor mechanism in controlling the output power of generator, voltage maintaining, generator synchronization with National Grid, generated different working modes, and loaded management according to the situation.
- Monitored operated parameters and recorded operated data including electrical generation, pressures, temperatures, vibration indications, alarms, and other information related to the safe operation of the powerhouse equipment.
- Responsible for startup, normal operation, load management and handling of various emergencies during the operation of the Unit.
- Maintained daily logs of operation, maintenance and safety activities.
- Investigated and reported accidents.

Maintenance Engineer

2006-03 - 2010-04

Avo Electrical Engineering Services

- Installed cameras security.
- Fixed problems of laptops, tablet, office PC.
- Fixed problems of imprimantes (Canon, Epson, Brother, Kyocera).

Education

Master of Sciences in Engineering, Electrical Engineering

2004 - 2006

Massachusetts Institute of Technology

Bachelor of Sciences in Engineering, Electrical Engineering

2000 - 2004

Massachusetts Institute of Technology