

# Richard Burgess

## Electrical Engineer

## Software Engineer

Feel free to contact me



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RichBurgessResume.com



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203.208.9577

### WORK EXPERIENCE

Jan 2014 - Present

#### @ Arconic - Turbine Components Corp. Controls Engineer

My main responsibility is as Controls Engineer: designing, procuring, installing and commissioning new controls and systems in the plant. As a plant with around 70 employees and a revenue of over \$2 million a month, my responsibilities also necessarily extend far beyond this, into mechanical and electrical maintenance work, IT support, server and network administration and engineering, labor resource planning, budget planning and capital projects.

I have been consistently working to improve plant engineering practices, support service organization and scheduling of labor resources necessary for plant support. Since we have such lean labor resources available to us, much of that work involves daily coordination of contractor and outside services.

In addition, I bring a strong background in software development with me, not only with regards to PLC controls (Rockwell, Siemens, GE, etc) and HMIs (Wonderware and others), but with Windows, web and database programming as well. Therefore, in addition to automation on the factory floor, I have worked to provide automation and data transparency to our business network as well. I have created our business' first intranet site that allows staff to view production floor data, inventory data, and other near-realtime data in dashboards.

I also have EHS roles as a program leader for Contractor Safety and Electrical Safety. In those roles, I have revitalized the programs and brought them from 'fair' assessments to 'good' or 'excellent' assessments year after year. My ability to organize and create written and digital systems have been instrumental in improving these programs as well as handing over these roles to new program leaders.

In addition to the specific EHS roles, I have been a champion and implementer of control reliable systems to safeguard our employees and contractors when interacting with our equipment. Standardizing our equipment with a minimum of Category 3 and SIL 4 safety and control circuits, we have experienced a safer and more reliable work environment.

Notable projects include:

- Inherited a Surface Grinder project, integrated safety controls and guarding as well as conforming it to our process.
- Designed and programmed a new standard inspection station for our Surface Grinder that ties into our intranet database.
- Design, programming, build and commissioning of Vision inspection system that reads dot peened text.
- Design, development, build and commissioning of Thread Chasing Machine prototype.
- Design and programming of new shift change bell system.
- Redundant Control of Non Contact Cooling Water System.
- Lead project to restore fire alarm system functionality, plant wide.
- Complete ground up revamp of new vacuum furnace area.
- Installation of new \$1 million vacuum furnace.
- Design, development, build and commissioning of new drying oven controls.
- Design, development, build and commissioning of new CNC Blending machine.
- Replacement of Main Switchgear in two Buildings, each in 4 days.
- Replacement of two 5 ton cranes with new VFD powered units.
- Redundant Control of Vacuum Furnace Cooling System.
- VFD Control of Furnace motorized systems.

I started my career assembling and servicing CNC laser cutting machines. I quickly progressed into production management, followed by Electrical Engineering and Project Management while designing and building pharmaceutical packaging machines. Along the way, I recognized business inefficiencies and waste and worked to correct those from my position with great success.

My 19 years of constant career growth took me from a position of building machines to designing and managing projects worth millions of dollars, often multiple multi-million dollar projects at once. These multi-million dollar projects were complex, often with thousands of I/O points and a dozen or more computers and drives.

In my current role, I am the Controls Engineer for a small but complex plant working on modernizing the systems and processes to facilitate multi-million dollar revenue each month. In addition, I am stepping into the role of Support Services Manager, which manages IT, Electrical Engineering, Maintenance and Facilities.

*Richard Burgess*

## WORK EXPERIENCE

Dec 2011 - Present

### @ Connecticut Carry

President/Executive Director

Connecticut Carry, Inc is a 501(c)(4) social welfare non-profit that I founded and I run. As a non-profit dedicated to civil rights revolving around educating residents of Connecticut about self defense and the laws surrounding self defense, Connecticut Carry has experienced excellent growth and success.

Under my leadership, and with a great board of directors, we have filled the information chasm that once existed in Connecticut about these topics with a high volume of content. This content ranges from written materials like press releases, newsletters and publications and audio and video presentations to live events and seminars.

I pride myself and my organization as being the most open and transparent organization of its type in Connecticut and possibly beyond. I strongly believe in a high level of transparency and honesty in what I do, particularly with money that is not my own.

Connecticut Carry is getting ready to enter its third year of pure growth under my leadership that includes increased marketing and merchandise to keep revenue up, but also with a large focus on educational content that should be record breaking for this field in Connecticut.

- Provides strong leadership.
- Responsible for creating and delivering proposals, reports and projections to the Board of Directors.
- Manages all accounting including accounts receivable and accounts payable.
- Responsible for all marketing activities.

Apr 2005 - Aug 2013

### @ I2S, LLC

Senior Electrical Project Engineer

As a Senior Electrical Project Engineer, my job involved designing the electrical systems of huge industrial hot and cold rolling mills and their integrated control systems. This design work included drive integration of motors ranging from 1 horsepower to thousands of horsepower, PLC controls, networked computer systems, SCADA systems and the installation planning and execution of those projects.

Extensive use of Autocad, Microsoft Excel and ERP systems was part of my job, as was extensive engineering coordination with vendors, customers, sub contractors and fellow engineers as well as the factory floor.

In addition to my daily project work, I saw a need for and worked to move our engineering department to standardized engineering systems including standard control parts and drawings. Included in these standards was my personal drive to improve our control reliability and safety standards. Proper Category 3/4 safety circuits were implemented throughout the large rolling mill projects, and sometimes were replaced or augmented by safety-rated PLCs.

- In charge of large and small projects involving large industrial cold rolling mills.
- Designed and purchased components that cost millions of dollars.
- Designed machines that have I/O counts upwards of 2000 points.
- Designed Siemens, Allen Bradley, ABB and GE control systems.
- I was in charge of projects from sales quoting to final commissioning.
- Designed systems containing multiple computers communicating in simple or complex network arrangements, and interacting with PLCs and HMIs.
- Heavily involved in the research and development of new products.
- Assisted in the design of our flagship gamma gauge product which employs gamma rays to accurately measure the thickness of the metal our mill is rolling.
- Designed and wrote the Windows software to manage network communication between devices.
- Traveled throughout the world for short or long periods of time where I was trusted to be independent and to make critical business decisions on my own.
- Worked internally to streamline business processes with respect to our ERP and job costing systems. (Continuous Improvement)
- Automated repetitive tasks and streamlined processes that have saved the company many thousands of dollars.

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Electrical Engineer & Software Engineer

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## WORK EXPERIENCE

Aug 2003 - Apr 2005

### @ Bausch and Stroebel

Lead Electrical Project Engineer/Project Manager

I started at Bausch and Stroebel as a 'Junior Electrical Engineer', but quickly advanced as my experience and talents were recognized. Quickly became the Lead Electrical Project Engineer in charge of designing all of the electrical systems on the pharmaceutical packaging machines we built.

In this role, I quickly saw that we were losing a lot of time on relatively mundane and inefficient processes. Through changes in and to personnel, tools and custom software that I developed, I took the initiative to streamline the design process from the ground up.

As I streamlined the engineering process and cut an average machine's design time in half or more, a large part of my job became managing the many projects that we were juggling at once. This was no major issue for me since I tend to be very organized and I am a natural multitasker.

I once again took the initiative to streamline and organize the project management realm through the use of custom software and by reorganizing personnel to handle processes in a more efficient manner. This once again resulted in substantial gains, drastically reducing our build times and inventory overhead as well as inventory losses.

- In charge of the electrical engineering department designing and building high end machines for the pharmaceutical packaging industry.
- Organized and streamlined the electrical assembly and design of the machines we built by writing and designing the software for an ERP system from scratch with ASP.NET and C#.
- Designed a system to integrate purchasing, engineering and sales as well as the rest of the company, which resulted in lead times for machines being cut in half and tremendous productivity gains.
- Developed applications for the Siemens PLC and HMI which has vastly increased the functionality of the machinery we built, allowing us to offer more and better products.

Jun 2000 - Aug 2003

### @ Lasercut, Inc

Field Service Engineer/Production Manager

I started by assisting in building CNC laser cutting machinery on the production floor, performing both mechanical and electrical work. I quickly progressed and after a short supervised period of field service and installations, I was travelling all over the country servicing and installing the machines.

After a company buyout, I was once again tethered to the home base, this time to supervise and train others in the construction of our machinery. With this role, I was now in charge of production schedules, maintaining inventory levels, quality control and keeping track of human resources as well.

## EDUCATION

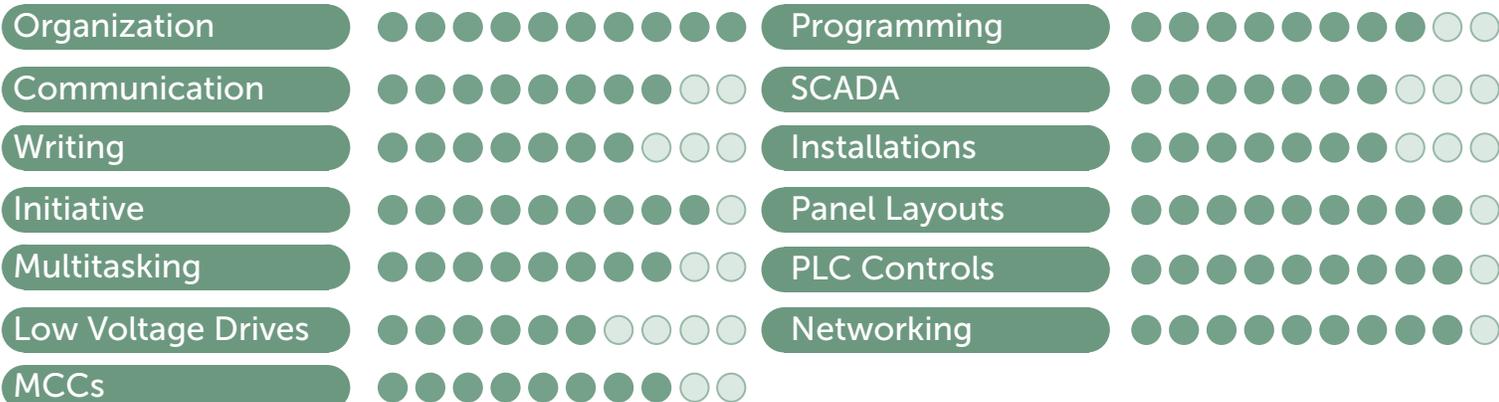
1996-2000

### @ The Morgan School

Clinton, CT

Studied computer science, technology.

## PROFESSIONAL SKILLS



## REFERENCES

Apr 2005- Aug 2013 **Mr. John Stone**  
@ Arconic (Turbine Components Corp)  
Production Supervisor  
Phone: 203.751.3307

Apr 2005- Aug 2013 **Mr. Matthew Decker**  
@ Eversource  
Field Service Engineer  
Phone: 860.601.0985

Aug 2003 - Apr 2005 **Mr. Kevin Glaser**  
@ Bausch + Strobel  
Manager - Electrical Engineering  
Phone: 866.512.2637 Ext. 415

## PROFESSIONAL SKILLS

|                    |            |
|--------------------|------------|
| Organization       | ●●●●●●●●●● |
| Communication      | ●●●●●●●●●○ |
| Writing            | ●●●●●●●●○  |
| Initiative         | ●●●●●●●●●● |
| Multitasking       | ●●●●●●●●○  |
| Low Voltage Drives | ●●●●●●●○   |
| MCCs               | ●●●●●●●●○  |
| Programming        | ●●●●●●●●○  |
| SCADA              | ●●●●●●●○   |
| Installations      | ●●●●●●●○   |
| Panel Layouts      | ●●●●●●●○   |
| PLC Controls       | ●●●●●●●○   |
| Networking         | ●●●●●●●○   |