

Danielle W. O'Hallisey

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Background Summary:

Electro-mechanical designer with 12+ years experience in drafting, designing, programming, & robotics/automation. Hard-working, skilled drafter with an eye to automating repetitive tasks, creating & maintaining drawing standards. Uniquely qualified to design the mechanical, electrical and controls portions of projects or serve as a bridge between various parts of a design team. Inventive and fast with the ability to quickly identify and implement alternative methods to solving design problems.

A Certified Electronic Technician, Associates Level plus Journeyman of Industrial Electronics.

Awarded SBIR Phase (0) Funding in 2007 for Investigating Non-Imaging Optics to Concentrate Solar Energy

Software Tools:

- ❖ SolidWorks Office Professional
- ❖ AutoCAD, AutoCAD LT & IntelliCAD-based DWG Editor
- ❖ Electronics Workbench schematic capture/circuit simulation/PCB layout tools
- ❖ Metrowerks CodeWarrior for Palm OS
- ❖ MS Excel, Access, & Word
- ❖ MS Visual Studio

Programming:

- ❖ VBA, SQL and other database design tools, particularly in MS Access
- ❖ Macro programming for Autodesk product family, including DIESEL & VBA languages
- ❖ C programming: Dynamic C for Z-World Industrial Controllers, MS Visual C++ for Windows
- ❖ Palm OS: Palm Object Language, PRC Tools & Constructor
- ❖ PIC Basic Pro for Microchip PIC embedded microprocessors
- ❖ Quickstep, Direct Step 32 (Koyo Ladder Logic), DMC (Galil multi-axis Industrial Controllers), others

Professional Experience

Calculated Technology, LLC, Montpelier, Vermont

A Technical Services Provider Focused On Innovative R&D Projects

(www.CalculatedTech.com)

Researcher, Draftsperson, PCB Designer & Programmer

June 2004-present

- ❖ Conducted Research in Alternative Energy Innovations (Ongoing)
- ❖ Created artwork for Printed Circuit Boards used in Electron Gun power supplies and controls
- ❖ Provided troubleshooting services for reporting system used in domestic solar power installations
- ❖ Created Software, SolidWorks Models & Layouts for clients in Communications & Engineering fields

Northern Power Systems, Project Engineering Division, Waitsfield, Vermont

A Power Systems Engineering Firm with Custom Systems on Seven Continents

(www.northernpower.com)

Electro-Mechanical Designer

August 2004-January 2007

- ❖ Created SolidWorks assemblies for Project Engineering & Sales branches of the company
- ❖ Created schematics in AutoCAD LT environment
- ❖ Programmed Access databases to generate Tags and Termination Schedules for large installations
- ❖ Generated AutoCAD Symbol Library System, simplifying schematics creation, which involved:
 - Electrical, Controls, P&ID and SAMA Logic Symbols accessible thru Image Tile Menus
 - Layer management automated in symbol placement macros
 - Macros for controlling the placement and editing of connections
 - Weekly Updates System, with
 - Automated Change Request Form within AutoCAD environment
 - Designed process flow for quick response and implementation of change requests
 - Authored software for downloading and installing updated symbols, menus and other system components seamlessly
 - Generated Symbols to IEEE, ASME and SAMA Standards

Moscow Mills, Inc., Moscow, Vermont

A Precision Machine Shop, Machine Design & Automation House

(www.moscow-mills.com)

Director of Systems Integration

October 1997-May 2004.

- ❖ Responsible for custom solutions provided to meet unique client needs, from contract negotiation through layout, implementation, documentation and final testing protocols
- ❖ Drafted, authored or co-authored, and supported software applications for Palm-Powered Devices, Z-World Industrial Controllers, Koyo PLC's and others
- ❖ Created project proposals, specializing in refining client concepts into usable end products
- ❖ Designed and laid out custom Printed-Circuit Boards
- ❖ Wrote and illustrated product functionality and GUI design specifications
- ❖ Specified electronic and mechanical components, software, Software Development Environments
- ❖ Co-designed, programmed and prototyped a high-speed CNC Wood Lathe, Tubing Bender, Forming Equipment for stamping molten glass, and unique fixturing & clamping devices for various industries
- ❖ Drafted 3D assemblies that included several to hundreds of individual components, utilized 3D drafting tools to animate and verify design concepts, detailed prints of verified 3D designs
- ❖ Programmed industrial controllers using Z-World's Dynamic C language, Quickstep State Language, Koyo PLC Ladder Logic and others
- ❖ Supported manufacturing floor of precision machine shop through print detailing and product inspection for precision mechanical parts and assemblies
- ❖ Generated Procedures and Templates for business and industrial processes in MS Word, Access and Excel
- ❖ Performed tuning and testing procedures on linear and rotary servo systems

FAR, Inc., Wolcott, Vermont

Electronic Designer, Manager, Sole Shareholder;

June 1997 - July 1999

- ❖ Designed, programmed and manufactured unique process-control equipment utilized by IBM, Essex Junction Vermont, to catch DNS Scrubber errors before they lead to faulty products
- ❖ Programmed embedded applications for metal-stamping equipment, CNC tubing bender and others for PIC Microcontrollers, utilizing PIC Basic language
- ❖ Developed and implemented test procedures and QC Inspection protocols for products

Education/Training

University of Vermont – Bridge Program: Completed 10 credits towards B.S. in Electrical Engineering (Calculus) G.P.A.: 4.0

Additional college coursework includes –

C++ Programming

Basic Electronics Principles

Servo Systems

Sensors and Transducers

Troubleshooting and Repair

Digital Electronics

College Algebra

Trigonometry

Industrial Electronics Certificate – Cleveland Institute of Electronics, 2000

Other professional coursework:

SolidWorks Essentials

Advanced Solid Modeling & Drafting

Mechanical Desktop software by AutoCAD

Principles of Project Management

Business Community Leadership

InventVermont (www.inventvermont.com) is a non-profit organization whose mission is to educate and assist Vermont inventors in developing and marketing their ideas. Board Secretary and Chair of the Annual Meeting, interviewing area inventors before a live and television audience.

Portfolio and letters of recommendation available upon request.