

FRANK A. PERNICE

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SUMMARY

Information technology and computer engineering professional with a wealth of experience supporting customers/clients and project teams. Thrives in environments of creativity and innovation to support rapid growth, new product development and quality controls. Able to communicate complex ideas to customers and provide training to users and co-workers. Competencies include:

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|---------------------------------------|---|
| ✍ Exceptional Customer Service | ✍ Agile Software Development |
| ✍ User Training & Support | ✍ Strategizing/Assessing Customer Needs |
| ✍ Critical Thought & Problem Analysis | ✍ Project Planning & Administration |
| ✍ Vendor Relations & Cost Control | ✍ Personable & Articulate Communication |
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EXPERIENCE

SPELLMAN HIGH VOLTAGE, Hauppauge, New York

2017 to 2019

Junior Embedded Systems Engineer

Responsible designing, implementing, testing, and integrating embedded software at this designer, producer and distributor of power supplies (primarily for medical devices), security applications, semiconductors and undersea cable power supplies.

- Reverse-engineered a legacy tool – a discontinued USB programmer costing \$1,500 per unit – via product disassembly and analysis, materials procurement and prototype design/development for a new programmer that was rolled out companywide, saving hundreds of thousands of dollars.
- Resolved a persistent issue in the production department where technicians used individual PCs to install product firmware instead of the network; implemented stricter firmware procedures and successfully facilitated use of the network to prevent recurrent firmware problems.
- Partnered with the IT department and senior management to address and resolve user access errors (technicians had write permissions) by establishing a new folder structure that gave all users the appropriate access and permissions.
- Coordinated the testing and rollout of the new Avecto Defendpoint enterprise software, establishing administrator rights and other appropriate permissions to staff at all levels during a period of IT security changes; also trained the Digital Design Group to use Defendpoint.
- Developed and implemented a program that reduced a complex, seven-step operation to a single step, effectively eliminating customer difficulties and updating a large volume of user manuals.
- Assisted customers in resolving technical issues and customizing product features; created custom user interfaces and upgraded firmware to meet customer firmware specifications.

VEECO INSTRUMENTS, Plainview, New York

2015 to 2016

Contract Software Engineer

Coordinated the writing and design of C++ software for the company's ASL-200 advanced lapping system at this semiconductor manufacturer. Collaborated with the software engineering team to develop and administer projects for various industries, with a focus on hard drives.

- Participated in daily scrum meetings to assess customer/market needs, develop plans, update progress, coordinate testing and deliver software for both new and enhanced products.
- Significantly reduced project costs and eliminated the need for supplemental engineering talent by reverse-engineering, rewriting and upgrading PLD firmware using VHDL.
- Partnered with the mechanical and systems engineers to resolve a months-long sequencing issue with the lapper for a key customer (Seagate).
- Acted as project liaison to the offshore electrical engineering contractor, coordinating the testing, design and progress updates; also reverse-engineered and updated the product firmware.

- Spearheaded the development of a RFID-based brand protection solution, successfully ensuring that the lapper would only operate with Veeco-brand cartridges.
- Worked closely with vendors to analyze the lapper's mechanical and electrical constraints and identify a suitable RFID tag and reader.
- Developed a reusable hardware abstraction layer that ensured the brand protection system would be adaptable to future product models.

NORTH ATLANTIC INDUSTRIES, Bohemia, New York

2014 to 2015

Software Engineer / Test Engineer

Member of the team working with multi-function I/O boards and single-board computers, including software development and testing for new and existing products.

- Developed an XML serialization library facilitating the simple and efficient storage, use, modification and transfer of both testing and calibration data.
- Tested and verified part of a multimillion dollar project for the U.S. Army (one of the most valuable contracts); also co-developed test plans and created testing software for new products.

Other Experiences

- > **The Home Depot:** Selden, New York – Order Fulfillment Associate, 2020-Present
- > **World Gym:** Coram/Setauket, New York – Lifeguard & Swim Instructor, 2015-2017
- > **Land & Sea Sports Club:** Patchogue, New York – Volunteer Swim Instructor, 2013-2017
- > **Young People's Day Camp:** Islip, New York – Lifeguard & Swim Instructor, Summers 2011-2015
- > **Sal Anthony's Pizzeria:** Selden, New York – Cashier, Server & Busboy, 2005-2009

EDUCATION

STONY BROOK UNIVERSITY, Stony Brook, New York

B.E. Computer Engineering & Applied Mathematics – Magna Cum Laude (High Honors)

- Minored in Computer Science.
- Interned at Texas Instruments in the software engineering department.

Professional Development:

- > The Dale Carnegie Course, 2016 – Dale Carnegie & Associates
- > Comedy College, 2017 – Governor's Comedy Club
- > Toastmasters International, 2020 – Present

TECHNICAL SKILLS

Programming/Scripting: C, C++, C#, Java, Bash, VHDL, XML

Software: Visual Studio, SVN, VirtualBox, IntelliJ, Doxygen, Eclipse, GNU Autotools, NetBeans, MS Office, MS Visio, Atmel Studio, Arduino IDE, TI Code Composer, TI Uniflash, Codewarrior, IAR Embedded Workbench, ISPLever

Operating Systems: Windows, Fedora, Ubuntu

PERSONAL

World Traveler – Have traveled by air, sea and land to Australia (five territories), New Zealand (north and south islands), Scotland, The Netherlands, Croatia, Italy, Ireland, Canada and Mexico, along with destination visits to 14 U.S. States. Developed exceptional skills at interpersonal relations among diverse cultures, navigation in unfamiliar areas and traveler financial affairs.

HONORS

Tau Beta Pi - The Engineering Honor Society
Eta Kappa Nu IEEE International Honor Society