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### Education

Bachelor of Science, Electrical Engineering Additional Major: Computer Science University of Wisconsin - Madison

• Emphasis in Electromagnetic Fields & Waves

# Work Experience

## Fluor Marine Propulsion - Knolls Atomic Power Laboratory, Niskayuna, NY IT Senior Advisor Enterprise Architect (2017-Present)

- Architect Azure, Windows, Virtual Infrastructure, Identity Services platforms
- Mentor, train, and advise individual contributors across the IT department
- Collaborate with senior management to develop enterprise-wide IT strategy and vision
- Manage Active Directory forest / Entra ID as Enterprise Administrator (22,000 users globally)
- Resolve high visibility technical issues across various IT disciplines
- Develop enterprise-wide applications and optimization workflows (C++/C#/PowerShell)

# Bechtel Marine Propulsion Corporation - Knolls Atomic Power Laboratory, Niskayuna, NY IT Principal Professional / Lead Software Engineer (2010-2017)

- Led team to design and deploy ConfigMgr / SCCM architecture for 13,000 endpoints across fifteen sites
- Led team of eight responsible for automated software distribution for over 700 applications
- Provided vision and guidance for upcoming enterprise deployments across many IT disciplines
- Proselytized and provided guidance for requirements-based design for IT projects
- Developed ConfigMgr / SCCM plugins to optimize software package creation (C#)
- Developed procedures to support enterprise transition to Windows 7 and domain consolidation
- Developed enhancements for custom enterprise password synchronization system (C++)
- Developed enhancements for custom Outlook add-in to support classification marking (VB.NET)

## Lockheed Martin - Knolls Atomic Power Laboratory, Niskayuna, NY Senior Electrical Engineer (2005-2010)

- Developed and supported test platform for Navy Instrumentation & Control equipment
- Developed Java, .NET, and Oracle applications for test platform and team task management
- Lead architect for specialized local area network (Windows, Cisco, Solaris, Linux)
- Developed and maintained VxWorks drivers and executive code for VME-based I/O system
- Acted as expert consultant in community for variety of software engineering areas
- · Acted as software quality control and configuration management coordinator
- Planned and tracked annual budget of test platform group
- Solicited, prioritized, and distributed incoming work for test platform group
- · Acted as information systems security officer for electrical laboratories

## Avista, Inc. (Subsidiary of Esterline, Inc.), Platteville, WI Software Engineer (2004-2005)

- Developed verification code for two Boeing 737/767 flight management systems
- Trained and advised oncoming team members
- Developed time-saving documentation tools used by a team of engineers

## University of Wisconsin - Madison, Computer-Aided Engineering, Madison, WI Novell Netware / Windows System Administrator & Programmer (2001-2004)

- Trained and advised 20 first/second level support personnel
- Deployed standard computer images for over 400 Dell machines via Ghost
- Programmed multiple applications to aid in network administration
- Configured, deployed, and managed over 300 applications with ZENWorks

## ShopKo Stores, Inc. (Corporate Headquarters), Green Bay, WI Workstation & Network Support Engineer (1999-2000)

- Managed workstation distribution and inventory
- Created and deployed images for 1000+ IBM workstations in four corporate buildings
- Provide on-site technical support for three buildings

## Other Experience

### Open Source Software Developer

### Lead Maintainer / Developer; Handle: @NoMoreFood

- PuTTY CAC (Active): Popular fork of PuTTY SSH client that is used by many federal agencies and commercial organizations to perform two-factor public key authentication using certificates.
  - Repository: https://github.com/NoMoreFood/putty-cac/releases
  - Language: C
- WinDirStat (Active): Popular disk usage visualization tool for Microsoft Windows.
  - Repository: <a href="https://github.com/WinDirStat/Wi
  - Language: C++
- Repacls (Active): File system utility to perform advanced manipulation of access control lists (ACLs) on NTFS volumes to support domain migration, problem detection, and forensic searches.
  - Repository: https://github.com/NoMoreFood/Repacls/releases
  - Language: C++
- WinPriv (Active): Desktop application to intercept and alter registry, network, and cryptographic operations of an arbitrary user process without needing to be an administrator.
  - Repository: https://github.com/NoMoreFood/WinPriv/releases
  - Language: C++
- Crypture (Active): Desktop application to securely store sensitive information (e.g., passwords) for a user or workgroup using certificate-based cryptography.
  - Repository: <a href="https://github.com/NoMoreFood/Crypture/releases">https://github.com/NoMoreFood/Crypture/releases</a>
  - Language: C#

### **Open Source Software Developer**

### Contributor; Handle: @NoMoreFood

- Microsoft OpenSSH: OpenSSH fork that is being included in Microsoft Windows operating systems as an addon feature. Major contributions include Kerberos SSPI integration, user/group detection and normalization algorithms, symbolic and hardlink handling, and enhancing process synchronization routines to allow for an arbitrary number of client connections.
  - Repository: https://github.com/PowerShell/Win32-OpenSSH/releases/
  - Language: C

# Certificates & Awards

#### **Certifications / Clearances**

- Auto-qualifier for MENSA (1998)
- Passed FE / EIT Qualification (2004)
- DoE Security Clearance Level 'Q' (Active)

#### **Awards**

- Lockheed Martin Spot Award for decisive actions that maintained continuity of operations (2005)
- Lockheed Martin Spot Award for development activities on serial card firmware (2006)
- Lockheed Martin Spot Award for technical expertise and customer support (2008)
- Lockheed Martin Team Award for contributions to submarine simulator project (2010)
- Bechtel Spot Award for contributions to major application deployment (2011)
- Bechtel Spot Award for intervening support to resolve high visibility issue (2014)
- Bechtel Team Award for success of Windows operating system upgrade and domain migration (2014)
- Bechtel Individual Achievement Award for development of scripted automation engine (2014)
- Bechtel Team Award for success of enterprise-wide two-factor authentication (2017)

#### **Software Skills**

### **Operating Systems Administration**

- Microsoft Windows (Expert, Recent)
- Linux (Intermediate, Recent)
- Solaris / SunOS (Intermediate, Past)
- Wind River VxWorks (Intermediate, Past)
- VMware vSphere (Advanced, Recent)
- NetApp Data ONTAP (Advanced, Past)

### Software Packages / Architectures

- Active Directory (Expert, Recent)
- Visual Studio (Advanced, Recent)
- Microsoft Office (Expert, Recent)
- Microsoft ConfigMgr / SCCM (Expert, Recent)
- IBM Rational ClearCase (Advanced, Past)
- NI LabView (Intermediate, Past)
- Novell ZENWorks (Advanced, Past)
- Symantec Ghost (Advanced, Past)

### **Programming Languages / Frameworks**

- C / C++ (Advanced, Recent)
- Microsoft C#, VB.NET (Advanced, Recent)
- PowerShell (Expert, Recent)
- PL/SQL (Intermediate, Recent)
- T-SQL (Intermediate, Recent)
- Java (Advanced, Past)
- Assembly: x86, PPC (Intermediate, Past)
- Linux Shell Scripting (Advanced, Past)
- HTML/CSS (Intermediate, Past)
- MFC (Advanced, Recent)
- Perl (Intermediate, Past)

#### **Other Tools**

- Microsoft Process Monitor (Expert, Recent)
- Wireshark (Advanced, Recent)

### **Hardware Skills**

- HP Digital / Analog Oscilloscopes (Intermediate, Past)
- HP Digital Multimeters (Intermediate, Past)
- HP Logic Analyzers (Intermediate, Past)
- XILINX FPGAs (Intermediate, Past)
- HDL Languages: Verilog / VHDL (Intermediate, Past)
- VME Bus Interface (Advanced, Past)
- Cisco Switches (Intermediate, Past)

## Personal Interests

- Open Source Software Development
- Computer Gaming
- Virtual Reality Applications
- Reverse Engineering