Zachariah Nobel

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SKILLS

• Excellent problem-solving, communications and management skills

- Demonstrated ability to acquire computer skills rapidly
- Strong client and intra-corporate management skills
- <u>Computer Languages</u>: Skyfoundry Axon, Perl, SQL database (MySQL), PHP, C, Python, FORTRAN, BASIC
- <u>Software:</u> SkySpark, Microsoft Office (Excel, Word, MS Access, Powerpoint), familiarity with Niagara Tridium Probuilder, Microsoft Dynamics CRM, Salesforce CRM, UNIX Shell scripting
- Operating Systems: Windows 3.11-Windows 10, UNIX (Linux Ubuntu, embedded), Macintosh
- <u>Computer/hardware:</u> Cell modems, VPN's, routers, Niagara Tridium JACE, BACNet Datapump, Obvious & Onset Hobo dataloggers
- <u>Electricity/Electronics</u>: Microprocessors, digital electronics, AC & DC power monitoring theory & hardware

EXPERIENCE

<u>Principal Performance Assurance Engineer, Constellation Energy (04/2014 – Present)</u>

My primary responsibilities are to oversee the collection, storage and analysis and reporting of Building Automation System trend data. In particular I oversee the management of the cloud based instance Constellation SkySpark platform (3.0) along with integrated Niagara and Connexxion based data collections services. These responsibilities include both integrating new technologies for collecting data, as well as developing a standardized libraries of trend data analysis algorithms.

Owner, Sunsolver Solutions LLC. (08/2013 – 5/2014)

Sunsolver Solutions provided Asset management services to EPC installers, system owners and solar portfolio managers. I oversaw 40 MW of solar production at sites across the country. Using remote diagnostic tools I identified events requiring response & coordinate with OEM vendors to see issues resolved in a timely and efficient manner.

Director of Asset Management, Bharath Srinivasan, American Capital Energy Inc. (10/2010 – 5/2013) American Capital Energy is an EPC contractor (Engineering, Procurement and Construction) of solar systems around the country. To date they've currently built more than 50 MW of solar systems, many of which are more than 1 MW and greater in size. My primary responsibilities are the design and implementation of data monitoring services for new projects, as well as maintenance and monitoring for existing systems. I oversee the design, implementation, commissioning, and management of Data Acquisition Service (DAS) components and systems for new PV systems. Maintenance responsibilities include solar system portfolio oversight, including solar system preventive maintenance and failure response. Other duties include contract negotiations & review for vendors providing Operations & Maintenance (O&M) services, client O&M contract proposal reviews & updates, and submissions. As the Director of Asset Management I am in charge of receiving, responding and settling client warranty claims.

Senior Customer Support Engineer, Bob Tagg, Fat Spaniel Technologies Inc. (8/2003 – 10/2010) While my last position with Fat Spaniel was senior customer support engineer, I joined the company as soon as it incorporated in 2003 with five employees. As a result I played an integral part in early corporate development in establishing both the hardware and SQL (MySQL) database platform from which the company grew over subsequent years. For several years I was on call 24x7 supporting network service functionality. As the company grew & departments were created dedicated to these functions my intrinsic understanding of the overall system allowed me to identify inherent system & software problems affecting the online service. With the growth of the company my excellent communications and diagnostic skills carved the path for me to become the senior customer support engineer. Responsibilities included customer support, onsite monitoring hardware installation, server system administration, software service programming, inter-departmental communications, OEM data monitoring hardware integration, beta testing & problem-solving.

Independent Contractor, Self-Employed (intermittently 5/2000 – present)

Developed and support client websites based on SQL database engines (primarily MySQL) providing information to CGI web scripted interfaces written in PERL and PHP programming languages.

<u>Director of Technical Services</u>, Darren Korn, Center for Renewable Energy and Sustainable Technology (CREST) / Renewable Energy Policy Project (REPP) (9/99 - 5/2000)

As the senior technical staff member I was responsible for hardware system design and administration, SQL database programming, CGI script writing, and interactive web project integration for customers adopting internet services in the sustainable industry (wind, solar, micro-hydro, biomass, energy efficiency). Projects included migrating all internet services from a Solaris-based platform hosted in Bouie, MD to a RAID-hosted linux server co-located at Above.net. Another complete migration was performed when CREST incorporated with REPP, and the company sold off its internet-based services to another hosting company.

Manager of Internet Services, Jennifer Jordan/Roby Roberts, CREST/REPP (3/99 - 9/99)

Managed all internet and computer services through a merger between CREST and REPP, supervised 5 staff members and negotiated major hosting contracts for internet services. Duties included design of database/CGI projects, public speaking, network system administration, and acting as primary contact for CREST during the transition to a merged state with REPP.

System Administration & Technical Services, Andrew Waegel, CREST (6/96 - 3/99)

Maintained mailing list software and archives, developed CGI programs with integrated SQL databases. Responsible for general system administration of the CREST web server and local office network.

EDUCATION

SkyFoundry Advanced Essential Axon Programming (August 2018)
Certified Measurement and Verification Professional (November 2015 to present)
NABCEP Introduction PV Certification Fall 2008
UC Berkeley Extension, Berkeley, 1998 (continuing education in SQL database design)
BA. Physics, Reed College, Portland Oregon, May 1994