Aaron DeMarre
Software Engineer

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Summary
Over a decade of achievements developing software solutions for the metrology and test & measurement industry Senior engineering lead in research, design, build, test and operations for a wide variety of services and systems, from instrument data acquisition and analysis to internal business tools.

Skills
Expertise: C#, .NET, WinForms, LINQ, SQL, Visual Studio, Windows Application Development, Subversion
Experience: Java, JavaScript, HTML, C/C++, Assembly, PHP, Lua, ASP.NET MVC, WPF, Hibernate/NHibernate, Entity Framework, Bootstrap, JQuery, Eclipse, Jira, Confluence, Git, Linux, Agile / Scrum methodologies

Professional Experience
Software Engineer, Thermetrics, November 2014 – Present
- Sole software developer on the engineering team, **responsible for every aspect** of the planning, design, implementation, testing, and deployment of **Thermetrics** software
- Maintained and extended **ThermDAC**, the primary Thermetrics software offering, which provides data acquisition, analysis, and instrument control for all instruments in the Thermetrics product line
- Developed ThermDAC support for **new instruments and custom projects**, including **interoperability** with external data analysis software and non-Thermetrics instruments
- Implementation of **advanced algorithms to extend ThermDAC functionality** such as heat flux calculations, automated generation of calibration constants, slope detection algorithms to determine fabric drying rates
- Designed and implemented a **utility for flashing instrument firmware** via USB
- Developed **internal web applications** to integrate data from multiple sources for reports on inventory, time estimates and project status for production and engineering teams, using ASP.NET MVC
- Designed and implemented a **database interface and report utility** to store and report on ThermDAC test data

Software Design Engineer, Fluke Corporation**, June 2007 – July 2014
- Led the initial implementation of **Scrum** methodology with Engineering team. Served as **ScrumMaster (CSM)** from 2013-2014
- Maintained and extended the **MET/CAL calibration automation** and management software suite
- Led development of a new version of **MET/CAL Editor,** developing a Visual Studio-based code editor for a domain specific language that provides **metrology automation**
- Developed the **interoperation between MET/CAL and MET/TEAM**, a web-based asset manager and calibration data repository using both LINQ to SQL and a REST-like web API
- Developed an **ORM layer in C# using NHibernate** to provide database connectivity for legacy MET/CAL metrology software which was reused in other applications and enabled the upgrade of our database engine
- Created deployment and packaging solutions for **providing MET/CAL calibration automation content to customers**

Network Analyst, University of Washington, September 2005 – June 2007
- Monitoring and troubleshooting of **a wide range of network devices** on the UW academic, UW and Harborview Medical Centers, K20, and Gigapop/Pacific Wave networks from the UW Network Operations Center (NOC)
- Coordination between **end users, telcos, and the appropriate agencies** to resolve a large range of network issues
- **Administration** of IP addresses, DNS information, and local contact information

Meeting Room Technician, Evergreen Healthcare, November 2002 – November 2005
- **Installation and service of presentation equipment** including LCD projectors, PCs, sound systems, etc.
- **On-call support** for all equipment, as well as training presenters on projection and sound systems

Customer Communications Technician, Qwest Corporation, October 2001– April 2002
- Remote troubleshooting and testing of **high capacity digital circuits** including T1's, T3's, OC-48's, etc.
- Dispatched **outside and central office technicians** based on test results
- Coordinated with **customers, outside technicians, and other internal groups** to resolve customer issues
- Worked with **independent telcos, CPE vendors, and long distance carriers** to resolve customer issues

Field Service Technician, Universal Computer Services, Inc., June 2000 – September 2001
- Performed troubleshooting and repair of **terminals, PCs, printers, and IBM application servers**
- Installed and maintained **LAN and serial networks**, including the interfaces between the networks

Education
Bachelor of Science, *Computing and Software Systems*, University of Washington Bothell, Bothell, WA June 2007
Associate of Integrated Studies, Cascadia Community College, Bothell, WA June 2005
Associate of Applied Science, *Electronics Engineering Technology*, ITT Technical Institute, Bothell, WA June 2000
- Graduate of the Quarter, Class Speaker

Certifications
CSM - Certified ScrumMaster (expired)