Justin Tyler Dubs

5428 Berry Creek Circle
Raleigh, NC 27613

(919) 901-0712
jtdubs@gmail.com

Sensus — **Senior Software Engineer** — *Conservation Solutions Department*

Sensus is the global leader in Smart Grid technologies. The Conservation Solutions Department is responsible for the design-to-delivery engineering of Sensus's wireless water and gas meter solutions.

Apr 10 – Present — **FieldLogic Suite** — *Lead Engineer*

The FieldLogic Suite of applications is responsible for the field installation, management, and monthly reading of all metering products, wireless and otherwise.

FieldLogic implements Sensus's proprietary, encrypted network protocol to allow running on a performance- and memory-constrained platform while allowing transmissions with a timing precision of 0.1ms.

Responsibilities:
– Designed and lead implementation of a complete software stack that is used by thousdands of utility companies.
– Lead a geographically distributed team of software developers and testers.
– Developed software schedules and planned releases with project management organization.
– Reviewed test plans and tracked test progress.
– Gathered customer requirements from, and reviewed software concepts with, marketing, sales and support organizations.
– Planned and helped organize manuals and training materials with documentation and training organizations.

Principal technologies: *C#, SQLite, WPF, WinForms, Windows XP/7/8, Windows Mobile 6.5.*

Jun 13 – Present — **FieldLogic API** — *Lead Engineer*

The FieldLogic API is designed to allow third-party work order management systems to the utilize FieldLogic Suite's capabilities and perform automated installations of Sensus's metering products.

Responsibilities:
– Gather requirements from work order management companies.
– Create a development plan and schedule for fulfillment of gathered requirements.
– Design and document a communications protocol to meet their requirements.
– Architect and oversee implementation of communications protocol.
– Collaborate with work order management companies to aide comprehension, answer technical questions, and guide integration with the API.

Principal technologies: *C#, Windows Mobile 6.5.*

Lenovo — **Research Engineer** — *Raleigh Advanced Technolgoy Center*

– Lenovo Master Inventor with over 30 filed patents and 20 technical publications.
– 2009-10 Inventor of the Year.

Job responsibilities:
– Design, prototype and deliver proof–of–concept implementations of new product concepts.
– Meet with external technology providers to evaluate solutions for portfolio inclusion.
– Protect our current and future product portfolios with substantial IP.

Jan 09 – Apr 10 — **Lenovo Skylight** — *Software Architect and Lead Developer*

Lenovo Skylight marked Lenovo's entry into the emerging Smartbook market. It was an ARM/Linux notebook with a custom software stack that focuses on multimedia consumption and internet connectivity. Skylight was to launch in July of 2010.

Responsibilities:
– Designed and prototyped the multimedia and content indexing systems.
– Designed an API to allow external applications to access the indexed metadata.
– Designed an API to allow external applications to control multimedia playback.
– Lead a small team of developers to complete development of these systems and APIs.
– Lead a three week workshop in Beijing, China to transfer ownership of these components from research to development.

Principal technologies: *Python, GTK, GStreamer, D-Bus.*

Feb 07 – Nov 08 **Lenovo Constant Connect** *Software Architect and Developer*

Lenovo Constant Connect is a Large Enterprise market offering that enables seamless mail flow to and from your PC by using your Blackberry as a mail gateway. Mail can be cached on the always-powered Constant Connect card for transfer between the PC and Blackberry when they next find themselves within bluetooth range, even if the PC is asleep or off.

This distributed system consists of a set of Windows services, an Express Card form-factor embedded computer, and a set of Blackberry services.

Responsibilities:
– Design and implementation of the communication and data synchronization frameworks.
– Design and implementation of all value-add software for the embedded system.
– Design and implementation of PC system services.
– Co-design and implementation of hardware control logic for embedded system.

Principal technologies: *C#, .NET, .NET CF, Win CE 5.0.*

Jun 05 – Nov 06 **Lenovo TechBuddy** *Software Developer*

Lenovo TechBuddy is an online services platform. Customers can purchase a varienty of services, from system configuration assistance to general troubleshooting. Customer Service Representatives then accept requests, chat with the customer, access the system's configuration history and even perform remote system takeover.

Responsibilities:
– Mock–up various HelpDesk concepts to elicit feedback from Marketing and Product Development.
– Develop prototype of Customer Service Rep application.

Principal technologies: *C++, Qt.*

IBM **Software Engineer** *Technology Strategy, Personal Computer Division*

Mar 04 – Apr 05 **Secure Internet Gateway Appliance** *Software Developer*

SIGA is a small-business PC management server, run on commodity desktop hardware, which would provide software inventorying, shared storage, configuration distribution and remote command execute.

Responsibilities:
– Design and implement the field-update system for the management server.
– Implement client GUI to allow end–users to make use of managed services.
– Traveled to New York to setup and support customers during our Beta program.

Principal technologies: *C++, Qt, Debian.*

IBM **Technical Intern** *Software Group*

Sep 03 – Dec 03 **IBM Extreme Blue** *Software Developer*

This internship program pairs interns with full–time development and business staff members. A seed idea is fleshed–out into a simple product concept, and the concept is prototyped.

We created a small–business, PC preloading system. Its web front-end allowed mapping of employees to corporate functions to preload images. The PCs would then network boot, find the right image, and install themselves.

Responsibilities:
– Design the implement the configuration database.
– Modify IBM Image Ultra Builder to be driven entirely from the command-line.
– Write boot code to identify the machine, and therefore OS image, and install it.

Jan 02 – Aug 02 **WebSphere Studio** *Software Tester*

IBM's WebSphere product suite is an enterprise, software–devlopment solution. Among its many features, is the ability to deploy code to and debug code on IBM z/OS systems.

Responsibilities:
– Develop test cases for WebSphere's z/OS components.
– Execute test cases and report bugs.
– Participate in frequent call with development to discuss and clarify bug status.

Education **B.S. of Computer Science**

North Carolina State University *Fall 1999 - Spring 2004*