Ernie Biancarelli

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I'm an experienced software development manager and developer and I'm passionate about shipping code, wowing customers, & making customers happy. From industrial control, to telecom, to cable television; I've worked on many different types and sizes of hardware/software systems. I like managing teams – love the challenge of making a group of individuals function at a high level. I can work effectively with in house groups and external teams/companies. With whatever I do, I want to be able to make a difference.

Professional Experience

Director at Time Warner Cable   **July 2013 – Present**
   Managing the day to day TWC set top products that are based on OCAP
   - team of 6
   - vendor management
   - program status
   - field support

   Led the RDK (Reference Design Kit) implementation @ TWC. http://rdkcentral.com
   - team of over 15 contractors and FTEs
   - video and high speed data software stacks
   - represented TWC at technical steering committee meetings
   - evangelize RDK platform within TWC
   - coordinated effort within TWC and with external vendors (hardware and software)

Software Developer at my home office   **September 2012 – July 2013**
   I'm living and working in Kunming, China as a telecommuting software developer.

Director at Time Warner Cable   **June 2010 – August 2012**
   Director of Client Software Development (January 2011 – August 2012)
   - Lead 36 full time software and test engineers
   - Manage $2 million budget and communicate budget spend status
   - Annual performance and salary review
   - Set team vision
   - Promote learning activities (best practices, introduction of new tools, etc)

   Acting Director of Client Software Development (June 2010 – January 2011)
   - Provide direction for 8 on shore talented software developers with varying skill levels and experience
   - Provide direction for 9 on shore test people
   - Provide direction for 15 off shore (India) software and test people
   - Encourage and evangelize Agile ideas
   - Engage in feature planning activities
   - Synchronize activities with other development groups
   - Keep team motivated and on task
   - Solve people problems
   - Manage $2 million budget

Principal Software Engineer at Time Warner Cable   **March 2005 – June 2010**
   Application Development (June 2008 – June 2010) – Leader
   - Provide critical review of other team members work
   - Provide design and architecture for new features
   - Mentor others on better software development process
   - Troubleshoot and solve field defects
   - Work with other groups within TWC enabling highly cohesive features

   Application Development (March 2005 – June 2008) – Developer
   - Member of a team building a Navigator (Guide, OnDemand, Pay Per View, DVR, etc) for Time Warner Cable's OCAP platform [deployed to 8+million customers]
   - Apps written in Java for an OCAP set top box runtime environment
   - Lead small team working on feature design and implementation
   - Provide critical review of other team members work

- Work with Scientific Atlanta and Samsung vendors on OCAP specification details

Senior Software Engineer at Vidiom Systems
   Set Top Box Development (October 2004 – April 2005) – Developer
- Review of Linux kernel code for set top box reference platform consisting of the Broadcom 7038 chipset.

Senior Firmware Developer at M2M Data Corporation   **April 2004 – October 2004**
   Custom Linux OS Creation – Developer
- Created a Linux kernel based OS for an embedded X86 SBC. Bootable from a Compact Flash card, the OS leveraged Open Source packages such as GRUB, BUSYBOX, SSH, PPPD, APACHE, and MYSQL.

   Process Improvement – Developer
- Studied the existing development processes and proposed a streamlined system for the development team. Instructed the team on CVS and reworked the makefile system to enhance the build process.

   Customer Support – Tech Support Engineer
- Actively working with customers to ensure M2M's products were functioning properly and configured properly in the field. Coordinated with several ISPs ensuring that M2M products had reliable internet connectivity.

Senior Software Developer at Aztek Engineering, Inc.   **June 1998 – April 2004**
   Digital Loop Voice Product Development (March 2003 – April 2004) – Technical Lead
- Served as the software technical lead. Created the software architecture and basic component designs for the product.
- Assembled a team of 8 software professionals, communicated the software architecture, and mentored the team through the first phase of design and software development.
- Involved in customer discussions regarding feature behavior and responsible for ensuring that features were configurable at compile time.
- Developed several utility pieces of software for the controller card.
- Applied the event and fault reusable management libraries to the product.

   Reusable Management Library (July 2001 – February 2003) – Developer
- Designed (using UML and Rational Rose) and developed reusable C++ platform-independent libraries for event and fault management targeted for both server and embedded platforms

   Credit Card Transaction Concentrator (December 2000 – June 2001) – Developer
- Part of a 3-person team, which created a Linux OS C++ application for concentration and transport of credit card data. Designed and developed software for sending and receiving data from the modems via a shared memory scheme. Implemented an object oriented state machine to control the modems.

   Digital Loop Carrier Product Development (June 1998 – November 2000) – Developer
- Led a 2-person team in designing and developing a basic TMN network management solution. Used CMIP and the DSET Agent and Manager Toolkit. Knowledgeable of TMN, Q3, MIBs, Agents, Managers.
- Created a software simulation environment in order for software development to proceed in parallel with hardware development. This allowed the software group to develop 90% of the fault and network management integration before hardware was available.
- Developed C++ application on the controller card providing a means for the network management application to interface to the product.

Software Engineer at Honeywell, Industrial Automation And Control   **March 1996 – July 1998**
   Control Product Test Automation – Developer
- Initiated an effort to develop software tools to speed and standardize product testing. This resulted in the release of a crucial product with minimal software defects.

   Automation Control Product – Developer
- Designed and developed real time embedded software for an industrial control application written in C and Assembly for a Motorola 68HC11 platform.
- Worked with a customer to create a Visual Basic prototype product interface which ensured customer expectations were met and reduced engineering product design.
- Honeywell Technical Excellence Award Nominee.

Courses

Stanford: iPad/iPhone App Development – CS139

Skills & Expertise

- Languages: Java, C, C++, UML, shell scripting
- Operating Systems: eCOS, pSOS, Linux
- Development Tools: Eclipse, Visual C++, gcc, gdb, CVS, makefiles, Rational Rose
- Network Programming with sockets and SSH
- Multithreaded applications
- Microprocessors: 68K, 68HC11, MPC860, MPC8260/8250, X86
- Protocols: HTTP, HDLC, V5.2, TR-303, IP

Education

- B.S. Electrical Engineering, West Virginia University, June 1996
- B.S. Computer Engineering, West Virginia University, June 1996

LinkedIn Recommendations

"Ernie is a level headed, get-it-done, manager with fabulous people skills. His contributions to our projects were always centered on improving the customer experience, producing a high-quality product, and getting it out the door."

— **Al Straub, managed Ernie at Time Warner Cable**

"I highly recommend Ernie. He was the technical team lead on a very challenging product development that I managed. He was responsible for overseeing the SW architecture of the product as well as designing and coding some of the more challenging components. He is a top notch SW engineer with very good people skills. I also applaud his strong commitment to improving software development processes."

— **Michael Winseck, PMP, CSM, managed Ernie at Aztek Engineering, Inc.**

"Ernie is a very personable team leader and talented programmer. His Event and Fault Management C and C++ software had a good architecture, was coded well, and came with excellent comments and user documentation. His C++ code demonstrates that he has a solid grasp of the subtleties of the language."
— **Lonnie VanZandt, worked directly with Ernie at Aztek Engineering, Inc.**