Antonio J. M. Ransom

Software developer and system architect with over 20 years of systems architecture, systems engineering and software development experience. Proficient in mobile platforms, Java, C/C++, web platforms and cloud platforms.

Summary of Qualifications

- Software development of novel networking concepts involving the publish-subscribe paradigm, implementing network-independent handover capability and network-based service applications
- Software development on cross-platform development tools to support applications on Windows, on Android, and on iOS
- Software development and architecture for the Bell Labs/Lucent Technologies CDMA wireless Core Network elements

Technical Skills

- Thorough knowledge of C, C++, Java, and other programming languages
- Ability to use a variety of software development environments to generate software solutions per requirements and architecture specifications
- Broad knowledge and experience in wireless network software development and in webbased application development
- Excellent communications skills

Professional Experience

Senior Software Developer, All Purpose Networks LLC

2013 - present

Developed the software used in the APN network-independent handover, both the device-based application and the network-based applications. Developed the Proxy software that interfaces client devices to their intended service hosts when the clients communicate through the APN network, but where the service hosts do not. Developed the network-based application and database used to locate the APN network routing instance that is closest to a user device.

Aridhio Technologies / Intelligent Loop (Founder)

Mobile and web application architecture, requirements and software development targeting industrial operations management: government systems, fire & life safety systems, transportation and logistics.

Develop mobile plus cloud based software solutions to manage physical assets, track deliveries and manage regulatory compliance inspections. These applications leverage a modern smart phone's ability to scan barcodes, take photos and acquire GPS coordinates on the data collection side and cloud computing on the back end for dashboards and reporting.

Interface directly with customers to understand business problems, define requirements and lead the development. Pennsylvania Turnpike Commission was nominated for an "Innovative Use of Technology in Public Safety" award using a solution that I designed and implemented.

Implemented a solution that collects and interprets the internal properties of mass civil structures using embedded sensors. Designed the low-level software to extract data, wireless connectivity to transport that data, and the server side software to collect, interpret and present the data from a web portal.

Alcatel-Lucent / AT&T Bell Labs (DMTS, 1994; CMTS, 2001) 1987 – 2008

Senior software architect and lead developer for a number of 2G, 3G and 4G wireless systems. Sole creator / designer for a virtual machine like framework that separated wireless call processing technology (CDMA, TDMA, GSM) from the hardware platform. Worked with a team of developers on the implementation. This significantly reduced time to market and development costs for the entire business unit. Received a Bell Labs President's Award for this effort.

Implemented a number of widely deployed developments in various mobile subsystems. Specifically, a distributed database solution in wireless networks; added new capabilities to a light-weight operating system for distributed processing; devised a fault tolerant network controller design (received patent) and a solution for preserving phone calls during a controller failover (received patent). Designed a solution for voice mail delivery that was adopted into the IS-41 Call Delivery standards.

Education	
MS Computer Science and Electrical Engineering Northwestern University	May 1990 Chicago, IL
BS Electronics Engineering Technology	May 1987
Norfolk State University	Norfolk, VA

Awards and Achievements

• Distinguished Member of Technical Staff

Awarded to Members of Technical Staff who exhibit sustained technical leadership and excellence

• Consulting Member of Technical Staff 2001

Awarded to not more than two percent of the population of engineers in the company, for continued technical leadership, year after year, in product development

Patents

- "Prioritized Load Balancing Among Non-Communicating Processes in a Time-Sharing System," US Patent 6148324, November 14, 2000, Antonio Juan Martinez (Ransom), Dennis James Weist.
- "Method and Apparatus for Stable Call Preservation," US Patent 6920320, July 19, 2005, Antonio J. M. Ransom, Dale F. Rathunde.
- "Method and Apparatus for Load Balancing in a Wireless Network," US Patent 7580716, August 25, 2009, Antonio Juan Martinez Ransom, John G. Hejny, David L. Oehring, Prashant K. Padhy, Gary Joseph Zabinski.

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