

***Communication Software Development • Design-to-Integration Project Leadership  
Client/Server Software Testing • System Integration Testing  
Web Server Application Design • Embedded System Software Design***

Energetic, forward-thinking embedded software engineer with demonstrated excellence in the development of leading edge telecom and networking products, as well as balanced, hands-on experience in operational management within the people-focused Senior Care industry.

Recognized for ability to cultivate strong, cohesive internal teams and facilitate complex, large-scale projects efficiently. Personable and effective cross-cultural communicator with fluency in Spanish. Earned two Master's degrees in Business Administration and Computer Engineering.

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**TECHNICAL EXPERTISE**

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<b>Languages</b>	C/C++ • Java • Visual Basic 2010 • Fortran • Assembly • HTML
<b>Operating Systems</b>	VxWorks • Windows 7 • Solaris Unix
<b>DB Management</b>	MS SQL Server • MS Access
<b>Networks</b>	TCP/IP • SNMP

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**NOTABLE SUCCESSFUL PROJECTS**

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- Designed embedded software for a local multipoint distribution service's wireless communication system in C/C++ for a base station. Delivered IP over ATM stack for VxWorks environment (as VxWorks does not provide IP over ATM feature for some BSP, the interface stack was developed to fit in stacks between IP and AAL5 layers). **Result: Saved company several thousands of dollars by avoiding the need to request the additional layer.** – Confidential, Inc.
  - Created HP Open View background services to manage a wireless communication network, creating the ability to discover network nodes, translate received traps to more meaningful traps, draw sub-maps onto OVW, and configure system via SNMP interface. **Result: Collaborated with team to immediately target the problem network device (NIU).** – Confidential, Inc.
  - Developed database application to access Oracle database via Pro C++, retrieve system data, and configure a wireless communication network according to Oracle. **Result: Created ability to configure the network within seconds, instead of manually in minutes or hours.** – Confidential, Inc.
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**SENIOR CARE EXPERIENCE**

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**Independent Senior Care Consultant • Chicago, IL** 2009 – Present

Provided operational consulting services to Senior Centers, while working full-time to complete Assisted Living Administrator Certification Program and RCFE Certificate Program. Maximized opportunity to expand knowledge of leading edge software programs (currently studying J2EE and NetBeans).

**Administrator • Confidential Healthcare Center • Chicago, IL** 2007 – 2009

Cultivated positive, open communication with employees and strong relations with external healthcare personnel. Maintained ~3.3 staff-to-patient ratio. Oversaw treatment authorization requests and submission of MDS reports. **Helped to boost census by 20% within just one year and reduced utility costs by 10%.** Directed state surveys for 2007 and 2008 without any major deficiencies.

**Administrator in Training** • Farmington Care Center • Chicago, IL Spring 2006  
*Training required by the LTC Management Certificate Program at University of Chicago (2nd of 2).*

Honed facility management skills including participation in corporate meetings, creation of operational reports (for QA, Finance, HR, etc.), staffing, accounting, review of service contracts, and assurance of OSHA compliance.

**Administrator in Training** • Maple View Manor • Chicago, IL Fall/Winter 2005  
*Training required by the LTC Management Certificate Program at University of Chicago (1st of 2).*

Mastered administration of Medicare patients including how to increase Medicare revenue by creating MDS. Contributed to management of rehab services, admission/discharge, nursing care, and overall operations.

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### SOFTWARE DEVELOPMENT EXPERIENCE

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**Senior Member, Technical Staff** • Confidential Corp. • Chicago, IL 1998 – 2002

Spearheaded development of embedded system software and real time applications from concept to execution. Selected to visit Beijing with company founder as liaison in 2001.

*Additional Select Projects:*

- Designed embedded software in C/C++ for a Base Procession Unit (BPU), which ran under VxWorks OS, to transmit LMDS MAC messages between a BPU and NIUs so the BPU can control the NIUs. Resulting product established data connection between the BPU and NIUs (time slots, bandwidth, etc.).
- Implemented an ATM SAR (AAL0/AAL5) driver (in VxWorks OS), which the BPU used to transmit LMDS MAC messages and payloads. It became the critical component to making the system operational.
- Developed SNMP proxy agent using Solaris. Since the BPU lacked SNMP agent capability at some point, the SNMP proxy agent was developed on a Unix platform, and the agent talked to HP Open View (using SNMP) and the BPU (using proprietary protocol). Enabled system to execute network management.
- Integrated protocol simulator using MFC and Microsoft Access in order to imitate NIUs so the simulator can generate proprietary message flow between a BPU/NIU and itself via TCP/IP. Collaborated to execute integration test for BPU and NIU and saved many testing hours.

**Senior Software Engineer** • Siemens/RCA/Philips • Hong Kong 1992 – 1998

Orchestrated development of embedded software, telecommunication systems, and various testing tools. Polished expertise in programming languages such as C, C++, Java, and Basic. Designed Auto Test System for a real-time serial port communication program.

Travelled to Germany to create simscript files for SINAP (Siemens Intelligence Network Protocol) messages that transported between SSP and SCP via SS7 (SCCP/MTP) link. Loaded and tested simscript files as well as UPT, CCS, and other services.

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### PROFESSIONAL DEVELOPMENT

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**Degrees**      **MBA, Healthcare Administration**, University of Chicago  
                  **M.S., Computer Engineering**, University of Chicago  
                  **B.S., Electrical Engineering**, Feng-Chia University • Taichung, Taiwan

**Licensing**    LTC Management Certificate • University of Chicago  
                  IL Senior Care Administrator License (#5555) • State of Illinois