Zoran Lazarevic

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Technical Skills

- C/C++, Java, JavaScript, Ruby, Perl, SQL, Bash, XML, HTML
- Top to low-level TCP/UDP/IP, PPP/SLIP, network management
- Windows, Linux, Lynx, pSOS, BSPs without an operating system
- Matlab, Mathematica, LabView
- Medical device development (Class II and III)
- Embedded systems, linear algebra, signal processing, robotics, electronics.

Experience

SENIOR SOFTWARE DEVELOPER   **Bloomberg, New York, NY**
12-2008 to Present

- Developed C++ back-end services (Solaris), C# web services, client facing GUI (JavaScript)
- Java JAX-WS web services, clients.
- Wrote interfaces to Oracle, SQL Server, proprietary databases, web services.
- Developed telephony Envox IVR applications and Genesys IVR TServer driver (multithreaded DLL).
- Developed Java SAML authentication client based on opensaml.
- Managed projects. Wrote testing specifications and deployment plans. Managed deployment and maintenance by coordinating different groups and vendors.

SENIOR SOFTWARE ENGINEER   **Nephros, New York, NY**
07-2003 to 11-2008

- Developed software for the first hemodiafiltration device in the U.S. (C on HC12, TMS320)
- Class II medical device, major level of concern, conforming to IEC60601-1-4
- Wrote specifications, design, risk analysis, verification&validation documents, user manual, SOPs under design control
- Involved in the whole development lifecycle, including IDE and 510(k) submissions
- Designed automated verification framework. Designed unit test framework. Performed V&V activities (reviews, testing, reports)
- Wrote software for extracting natural language requirements from Visio documents for automated software verification (Ruby+OLE, Visio, VBScript)
- Troubleshooting electronics (digital, analog, RF), hydraulics, sensors
- Designed Graphical User Interface, performed ergonomic assessment

SENIOR SOFTWARE ENGINEER   **Ion Networks, Piscataway NJ**
04-1999 to 05-2003

- Wrote telecom security software in C, C++, assembler for 68360 and MPC8360 (PowerPC)
- Wrote RS232 device drivers and SLIP/PPP protocols on LynxOS, pSOS. Modified Linux drivers.
- Implemented multi-factor/challenge-response authentication
- Network management agents: Implemented legacy-to-XML data access, designed SNMP agent with bindings to a scripting language.
- Modified all code, from device drivers to application layer, to expand from 2- to 4-byte pointers
- Designed Java auto-documenting tool for legacy CCL code, w. JDBC/SQL storage.
- Developed C/C++/Java/Tcl software for secure management and monitoring of critical infrastructure.
- The solution spanned Windows, Linux, Lynx, pSOS OSes, utilized iptables, XML communication, MS-SQL back-end.

CONSULTANT (Part Time)   **Transcripts Associates, New York, NY**
                                                                              2001 to Present

- Developed Winamp and Windows Media Player plugins (Visual C++) for USB and RS232 pedals
- Developed DSP algorithms (Matlab) and plugins (C++) for decoding digital time code embedded in audio signal (SMPTE LTC)
- Win32 API GUI, multithreading, interprocess communication
- Subcontracted and oversaw work of other developers

SOFTWARE ENGINEER   **Cardio Technologies, Pine Brook, NJ**
                                                                              09-1997 to 04-1999

- Designed software for a Class III life-supporting medical device (C++, i386, PC104, no OS)
- Responsible for software development through entire product life cycle: from requirements through implementation to validation and QA
- Developed and implemented DSP algorithms for real-time EKG R-wave and Tachycardia detection on SHARC DSP microprocessor (patented)
- Coordinated logistics and conducting of animal studies
- Designed LabView automated testing software for validating EKG detection

GRADUATE RESEARCH ASSISTANT   **Columbia University, Computer Science Dept**
                                                                              06-1996 to 09-1997

- MS Thesis: Stewart Platform with Fixed Actuators as a Platform for Coronary Artery Bypass Graft Surgery
- Developed data acquisition, signal processing and robot control apps in C++, Matlab, Labview
- Designed and implemented C++ software to control a heart-assist device (Borland C++ Builder)
- Devised algorithm for estimation and B-spline 3D modeling of beating heart from ultrasonic signals (Matlab, Java 3D visualization)

SOFTWARE DEVELOPER   **COCOS Computers, Yugoslavia**
                                                                              12-1993 to 05-1996

- Implemented SQL FoxPro accounting application as a team member
- System administrator for NetWare, TCP/IP, Microsoft Network LAN
- Trained novice computer users, designed corporate web pages

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Education
- M.S. in Bioengineering, concentration in Computer Science, Columbia University, 1997
- B.S. in Electrical Engineering, concentration in Telecommunications, Belgrade University, Yugoslavia, 1995

References available upon request.