Tom Ryan

Technical Staff, Center for Election Integrity
Public Monitor of Cuyahoga Election Reform

EDUCATION & PROFESSIONAL DEVELOPMENT

Cleveland-Marshall College of Law, Cleveland State University, Cleveland, OH
 Juris Doctorate expected May 2007
 Courses included Election Law (highest grade in class) and Computers and the Law

Ashland University, Ashland, Ohio
 Bachelor of Science with Honors in Chemistry, May 2000
 Internship: Akron City Hospital's Information Technologies Department, Summer 1999

Technical Masters in Java Programming from SetFocus, November 2000.

SENIOR TECHNICAL CONSULTANT

Over 6 years of broad-based IT/Telecom experience with a proven record of accomplishment in the areas of database development/management, Java development, C#, IVR/voice recognition, CTI and VoiceXML. Strong technical knowledge and analytical abilities combined with excellent interpersonal and communication skills allow me to work effectively with those who have not been technically trained as well as with those who have sophisticated technical facility.

CERTIFICATIONS & AREAS OF TECHNICAL EXPERTISE

Certifications: 310-027 Sun Java Developer
  310-025 Sun Java Programmer
  Microsoft SQL Server 7

Programming Languages: Java (Java Beans, Java Servlets, Swing, JDBC, EJB, JSP), C#, C++, Java Scripting, HTML, XML, PHP.

IVR Technologies: VoiceXML 1.0/2.0, CTI, Websphere Voice Response/DirectTalk, Nuance ASR Server, Nuance Vocalizer, DirectTalk State Tables, ViaVoice Recognition Server, ViaVoice TTS Server, WVR plugin for Nuance.

Operating Systems: MS DOS, Windows 3.x/95/98/00/XP, UNIX (Solaris, Linux, AIX).

Software: Websphere Studio Application Developer, Microsoft Office, Corel Office, Microsoft Visio, Visual Studio, Lotus Notes, Outlook, JCreator, JBuilder.

Hardware: NT/Win 2K Workstations, Aspect ACD, Ethernet cards, motherboard configuration and integration.

Network Protocols: TCP/IP, SNMP, SMTP, RMI, IIOP, Ethernet (802.11a, 802.11b).

Databases: Oracle 8i, MS SQL 7, Sybase, IBM DB2, PostGres, MySQL.

TECHNICAL CAREER HISTORY

SENIOR TECHNICAL CONSULTANT
IBM
Summer 2006 to Present

Assigned as a Consultant to IBM with Sprint and Nextel. Primary responsibilities include development, implementation, testing, and deployment. The main project currently underway involves the combination of billing systems between Sprint and Nextel. Developed IVR applications in DTMF/Voice Response in both English and Spanish. Responsible for Tier 3 technical support for the IVR systems. The IVR system handles approximately 6-7 million calls per month.

CENTER FOR ELECTION INTEGRITY
Cleveland State University, Cleveland OH
Technical Staff for Public Monitor of Cuyahoga Election Reform, October 2006 to Present

Review of electronic voting and tabulation technical and related managerial systems predominantly for compliance with good/best practices per established private sector data intensive industries; provided internal recommendations for risk reduction (security, accuracy and reliability issues) with regard to maintenance of election database, scanner networking, logic & accuracy testing, and related issues. Drafted/edited memos and reports for nontechnical audiences explaining problematic issues. Conducted preliminary election database review for suspected corruption.

JAVA DEVELOPMENT CONSULTANT
Viecore   Upper Saddle River, New Jersey
November 2000 to July 2004

Assigned as a Consultant to Viecore with responsibility for designing applications and supervising as many as 5 developers responsible for the implementation of these applications.

Projects and accomplishments include:

- Completed a CTI screen-pop application for Kaiser Permanente of Colorado. This application accepts a user medical record number via a state table and queries a database for information about that user. If the user transfers to a call-center representative, caller information is automatically placed onto the CSR's monitor. Switch technology is a Genesis G3 that uses the Genesis framework technology running on IBM RS6000 machines. Screen-pop developed using C#.

- Completed the design/development of the IBM WVR/Nuance plugin that connects the IBM VXML 2.0 browser to the Nuance ASR and TTS systems. Viecore was contracted by IBM to develop this software that will be sold under IBM as a WVR add-on. Served as the lead developer for project. Responsibilities include design, development, testing and delivery of Java code and state tables. Reported to Senior Management on a weekly basis to Viecore, IBM and Nuance. Skills required include VoiceXML, Websphere on AIX, Nuance ASR/TTS, Java, and the Websphere VXML 2.0 browser.

- Completed a CTI application for Alliant Energy of Iowa using C# integrated to Aspect switches, Aspect Contact Server and an Edify IVR. This application is a screen-pop application that queries the Aspect Contact Server using ActiveX controls and pops caller information (such as ANI, account #, transfer reason) to a customer service representative.

- Worked on development team for Detroit Energy's IVR system based on VXML on Websphere Voice Response. Wrote a WVR plugin which connects the WVR 1.0 Voice Browser to Nuance TTS and ASR systems. Served as a lead developer of entire application. Technologies used include JSP, VXML, Java, WVR, Nuance ASR, Nuance Vocalizer, DirectTalk State Tables and DB2.

- Conceived, designed, implemented, tested, and distributed a monitoring software program for Sprint PCS using Java and Edify. This program pages a field technician if any pre-defined errors occur on their call center servers. The software also collects information about each server (such as memory utilization) every 15 minutes and keeps a wrapping log of the information. This software is currently installed on 70 servers within the Sprint PCS network, which service about 8 million calls per week.

References:

Professor Candice Hoke, Director, CSU Center for Election Integrity 216.798.4643 cell; 687.2313 W;   others upon request.