KHANH VO **SR. SOFTWARE ENGINEER**
SECURITY CLEARANCE: SECRET

EDUCATION:

B.S., Computer Science, University Of Cal Riverside, 1999

EMPLOYMENT HISTORY:

SYS Technologies/Antin Engineering	2003 to Present
Verizon Corp	2003-2003
Oncall System.	2002-2003
General Magic	20012002
Encore Development	2001-2001
Xerago	2000-2001
Raytheon System	1999-2000
Luminex Inc.	1998-1999
UCR	1997-1998
NCR Corporate	1997-1997

SUMMARY OF EXPERIENCE:

- Over 9 years of software development experience with J2EE, SOA, IVR (Interactive Voice Response) Systems, Content Management Systems, XML, System Administration, and Ontology.
- Software Architect for critical Voice Applications at Verizon Corporate.
- Content Management System consultant for Fortune 500 companies through out the world.
- Lead Software Architect of Chula Vista CommandRESPONSE System.

HISTORY/EXPERIENCE:

SYS Technologies/Antin Engineering, Inc., San Diego, CA, November 2003 - Present, Sr. Software Engineer / Software Architect

- Participated in Trident Warrior 06.
  - Created a web service to publish Vigilys data to DMIS in CAP format.
  - Created a web service to publish Vigilys data to RIMS.
  - Design Data Publisher application for Vigilys.
  - Created a XSL transformation web service.
  - Participated in AFCEA.
  - Developed a web service that publishes Vigilys data to SPAWAR WebCop.

- Participated in Trident Warrior 05.
  - Deployed Vigilys to the Navy's Second Fleet.
  - Integrated Vigilys to the CAS (Collaboration at Sea) Lotus Domino Application.

    - Automated posting of GEO Spatial maps to the CAS application.
- Katrina Initiative
    - Pulled missing persons data from several websites including the American Red Cross. If the last known address was specified, ESRI's address web service was used to retrieve the latitude/longitude.
    - Using the latitude/longitude, the user's information was posted the VPresenter GIS map.

- Project Manager/Lead Engineer for SPAWAR's Human System Performance Assessment Capability Portal.
    - Designed an Ontology that represents the HSPAC's taxonomy using Protégé and Sesame.
    - Created a survey wizard that that ties into instances of an Ontology.
    - Design search capability for Oracle data and Ontology data.
    - Design a tree view of the Ontology.
    - Design HSPAC Web Portal using Jetspeed.
    - Managed requirements and wrote Software Requirements.

- Part of a team of engineers in developing Vigilys, which is the new version of the CommandRESPONSE system developed at Antin Engineering.
    - Deployed Vigilys to CALOES, Livermore, and Caltrans.
    - Created a BPEL process that receives data from various sources (CAD, Vehicle Positions, PEMS, etc) and executes the appropriate web services.
- Research and development of an XML Directed Solution Framework.
    - The framework serves a mediator between disparate data sources using semantic web. The framework has been successfully deployed on the CommandRESPONSE system. The CommandRESPONSE system has been developed for the City of Chula Vista and Department of Homeland Security. The CommandRESPONSE is a system that coordinates all types of wireless communications and uses intelligent software to evaluate, analyze and predict where trouble spots exists and where help is needed. If a mass emergency does take place, the CommandRESPONSE system will notify key personnel and the public through emails and outbound VOICE calls. Designed the CommandRESPONSE Ontology to be the mediator between the disparate data sources (CAD, Qualcomm Hazmat Tracking, Event Correlator).
    - Designed Pub/Sub environment using SOAP and JMS.
    - Designed several web services.
- Created a demo VOICE application using Intervoice Brite's voice gateway. The voice application take the caller's home telephone number as input and returns their name and home address. The application allows the user to change their name and address.
- Technologies used included: Cocoon Framework, Keel Framework, Stanford Protégé, Sesame OpenRdf Repository, Tomcat, Axis, MySql, VXML, OpenJMS and Intervoice Brite, Oracle, Jetspeed, Active Endpoint, ActiveBpel

PRIOR WORK HISTORY:

Verizon Corporate, Dallas, TX, Jan 2003 – August 2003, Sr. Software Engineer / Software Architect

- Created 2 new transactions: Get Payment Location and Disconnect Service. The two transactions handle over 7000 calls a day and are built on a Controller architecture that I designed.
- Architect the front-end of the Call Management System/SVRU-Soft Voice Response Unit base on the Business Requirement Specifications from the client and User Interface Specification from Speech Works.

- The SVRU is written in VXML/XSL/XML/Java/Javascript. It runs on Voice Genie and Weblogic. In building the Call Management System, I designed and developed re-usable Models that allow maintaining and future development of Voice Applications easier
- Designed and wrote Voice grammars on the BBN Hark ASR.
- Wrote design docs and programming specs
- Write packaging scripts using System 5 and RPM.
- QA BBN grammars and the Voice Genie Platform
- Technologies used: Weblogic, Java, VoiceXml, System 5, RPM, Perl, BBN, XSL, XML, Voice Genie, and Javascript

Oncall System, San Diego, CA, October 2002 – January 2003, Software Engineer

- Developed and designed Voice Modules that automates hiring over the phone. The voice application retrieves a list of companies from a database base on the user's input.
- Refractor existing code
- Integrated application with Intervoice Brite's Voice Browser
- Technologies used: Java, VoiceXML, JSP, Bevocal, Speech Works and Nuance

General Magic, Sunnyvale, CA, May 2001 – Sept 2002, Software Engineer

- Prototyped and developed the Magic Talk Enterprise Platform. We went from prototype to release in 7 months. The MagicTalk Enterprise Platform is a highly scalable, reliable, open-architected voice application development and deployment platform that enables Enterprises and service providers to quickly integrate voice access to existing e-business applications. Leveraging the J2EE enterprise software component architecture the MagicTalk Enterprise Platform brings the critical benefits of application extensibility, connectivity, scalability, and reliability to voice-enabled services.
- Worked with a team of Speech & Language to design and build a collection of Talklets that provide easy-to-use, predefined dialog components to simplify the development of natural conversation voice user interfaces. Each Talklet represents a pre-tested unit of conversation for a commonly used dialog function, and is accompanied by a grammar and prompt library, and a parameter set for extending and customizing the dialog function. The Talklets provide a real-time synchronization of events and transactions through dynamic script generation
- Created a set of JSP custom tag libraries that allow a voice application developer to build VoiceXML scripts utilizing the EP in addition to allowing interaction with back-end J2EE services. If required, these tags will generate the appropriate VoiceXML to achieve the result desired by the application developer.
- Held a training class on the MagicTalk Enterprise Platform for a client (Public Utilities of New Mexico).
- Integrate the platform with Intervoice Brite Voice Browser
- Exhibitor for General Magic at Java1 – Demo the MagicTalk Enterprise Platform
- Wrote an Interwoven TeamSite SOW for Onstar
- Technologies used: Java, VoiceXML, JSP, EJB, Application Servers(Weblogic, Websphere, Jboss/Tomcat), Voice Gateways/ASRs (General Magic, Nuance, SpeechWorks, IVB), Javascript, Servlets, XML/DOM, Xerces, ANT, Struts, Win 2000 & Solaris.

Encore Development, San Diego, CA, December 2000 – May 2001, Sr. Software Engineer

- Debugged Java code for the OnStar system.
- Successfully completed the development and deployment of an Interwoven TeamSite Content Management system at Farmers Insurance Group in Los Angeles. This solution included 12 Templates, 3 workflows, integration with IBM Websphere 3.2.2.1, and deployments to multiple production webservers in geographically separate locations. Project was completed on time in 90 days within budget for a very satisfied customer. Technologies used included: Perl, Java, JSP, XML, TeamSite, Websphere, Solaris.

Xerago LLC, San Diego, CA, February 2000 – December 2000, Software Engineer

- For GE Power Systems, project/lead engineer involved in installing and configuring Interwoven's TeamSite Web Content Management System for GE Power Systems Intranet. Wrote several customized Workflows which involved many Perl scripts. The scripts checks if SSIs exists in HTML files, checks if class files are accompanied by java files, allows certain Editors to be able to bypass an approval process, deploys to multiple servers, and a E-mail GUI that allows selection of addresses. During this time, I also configured TeamSite to work with Weblogic, and created several XML templates. Technologies used included: Perl, Java, JSP, XML, TeamSite, Weblogic, Solaris.
- For Intel, created several templates and workflows for TeamSite. Debugged many of Intel's installation and file permission errors. Developed workflows and templates for many of Intel's clients. Technologies used included: Perl, IIS, XML, TeamSite, Weblogic, Broadvision, Windows NT.
- For Tanning Technology, consulted on the implementation of TeamSite Web Content Management System. Design and created a workflow for Tanning's client. Also involved in debugging file permission and installed/configured Open Deploy. Technologies used included: Perl, XML, TeamSite, Websphere, Solaris.
- For a global merchandise trader (Philippine, Manila), Global Sources, lead engineer involved in installing and configuring Interwoven's TeamSite Web Content Management System. Created several customized Templates and Workflows. A big piece of this project was the reorganization of their existing web content for virtualization with TeamSite. Developed of an efficient branching structure and an appropriate configuration of the proxy. Technologies used included: Perl, Java, JSP, XML, TeamSite, Websphere, Solaris.
- For GetThere.com, involved in the kick off of Interwoven's TeamSite Web Content Management System and designs of some of their Workflows. Technologies used included: Perl, Java, XML, TeamSite, Websphere, Solaris.
- For Etrade.com, was called to upgrade Etrade's TeamSite version and recovered many of its corrupted Workflows. Technologies used included: Perl, XML, TeamSite, Solaris.
- For AskJeeves, design and build TeamSite Workflows, OpenDeploy and an emailing system. Technologies used included: Windows 2000, Perl, XML.
- For Compaq, worked as project lead to kick off and design the TeamSite architecture. Technologies used included: Perl, XML, TeamSite, Windows NT.
- For Looksmart.com, design and coded a workflow. Technologies used included: Perl, XML, TeamSite, Solaris.
- For Commerce One, installed TeamSite Web Content Management System on their NT and Solaris platforms.
- For PlantetRx, involved in installing and configuring Interwoven's TeamSite Web Content Management System. Created several Templates and Workflows. Was also involved in installing and configuring of Open Deploy on NT and AIX. Technologies used included: Perl, XML, TeamSite, IIS, Windows NT, AIX.
- For Novell, involved in integrating TeamSite and Broadvision. Technologies used included: Perl, XML, TeamSite, Broadvision, Solaris.

Raytheon Systems, San Diego, CA, July 1999 – February 2000, Software Engineer

- Developed and designed a Java application using Java 3D to simulate and test the survivability of a computer network on a defense destroyer of the 21st
- Technologies used: Java3D, Windows NT.

Luminex Inc, Riverside, CA, December 1998 – July 1999, Software Engineer

- Wrote Unix applications and shell scripts that allowed end users to perform logging of devices on the SCSI Juke Boxes.
- Technologies used: C, Red Hat Linux, Irix, Solaris, HP-UX, and Born Shell.

University of CA, Riverside, CA, September 1997 – December 1998, System Administrator

- Performed computer lab maintenance and tutored students with Windows applications and MatLab.

NCR Corporation, San Diego, CA, June 1997 – September 1997, Software Engineer

- Designed a user interface for NCR's SCSI BUS Analyzer. IO Analyst is a tool that was developed to gather information about IO's sent through NCR's q720 SCSI Driver. he data gathered by the IO Analyst is taken from kernel memory and dumped in raw form into a file. The IO Analyst also allows you to send timestamps into the trace so that specific events can be found easily.
- Technologies used: C and Unix.

HARDWARE/SOFTWARE EXPERIENCE:

- Computer Graphics: OpenGL, Java3D
- Programming Languages: XSL, XSLT, Java, Java 3D, C, C++, XML, VoiceXml, Assembly, Bourn Shell, Javascript, JSP, EJB, Servlets, and Perl.
- System Administrations
- OS: Windows, Red Hat Linux, Solaris, BSD, AT&T, and SUSE
- E-commerce Servers: Interwoven TeamSite (CMS), Weblogic, Broadvision, Jboss/Tomcat, and Websphere.
- Frameworks: Eclipse, Apache Cocoon., DML, MVC, Struts, and Keel
- Tools: NetBeans, Eclipse Visual C++, Visio, Ant , CVS, Cleartool, Subversion
- Speech Recognition (ASR): SpeechWorks, BBN, and Nuance.
- TTS (Text To Speech) Engines: Rhetorical, Acuvoice, and Speechify
- Voice Gateways/Interpreter: VoiceGenie, Dialogic, General Magic, Nuance, BeVocal, and Intervoice Brite
- UI: Voice User Interface (VUI)
- Packaging Tools: System 5, RPM