

MENTOR CANA, Ph.D. Candidate

CHERRY HILL, NJ 08034

e-mail: mentor@scils.rutgers.edu

KEY WORD PREFACE

Information Systems Infrastructure/Architecture, Reuse and Knowledge Management, Collaboration, Content Development, Network and Information Systems, Technical Writing, Service and Feature Design and Development, Information Systems Management, Teaching, Process Design and Development, Process Re-engineering, SDLC, Implementation of New Services and Integrated Solutions, Internet Consulting, Customer/Client Consulting, Business Analysis and Planning, Delivery of Information Technology.

OBJECTIVE

To work on projects where I can concurrently utilize both my newly acquired academic experience in information science (Ph.D. training), and my professional experience as information systems analyst/architect. More specifically, I would like to get involved in content and information design, development and management, Digital Libraries (DL) and repositories, information research, and strategizing and planning on how to better design and utilize information and communications systems and processes in organizational settings.

PROFILE

14+ years of professional experience. Technology and business focused Information Systems Professional, with an affinity for strategic business consulting in telecommunication and information systems. Experienced in Information Systems Architecture development, information infrastructure design and engineering, IP Telephony, VoIP, IPTV, process engineering and re-engineering, Service Oriented Architecture (SOA), Service Delivery Platform (SDP), development of requirements and specifications, Services and Feature Design and Development, Internet Consulting, Systems Evaluation, Technical Writing. Able to see the 'big picture' (technical and business holistic approach to system design) throughout all phases of SDLC; with special care for individual systems interoperability and integration into the whole process to deliver the required product functionality and capability. Industry experience gained at companies such as: AT&T, Telcordia/Belcore, IBM, SBC.

PROFESSIONAL BACKGROUND

MICROSOFT

Technology Service Professional / Technology Specialist

Iselin, NJ

June 2005 - Present

As a Technology Service Professional in the Communication Sector North America, more specifically as a Technology Specialist for the Connected Service Framework (CSF), I am part of the Service Technology Unit (STU) team tasked with assisting the Microsoft's field force in the communication sector with technical expertise in the pre-sale process. CSF is a product and a framework, build on the concepts of Service Oriented Architecture (SOA), enabling service providers to build their service delivery platforms for rapid service delivery with emphasis on service aggregation and orchestration at the Web Services layer, independent of the platform user to create the services, independent of the service provider and independent of the device the service is finally delivers. In addition to CSF being used as an enabler for service delivery with rapid time-to-market and tremendous savings as the result of reuse of resources and basic services, CSF can also reduce the cost in building effective and efficient internal processes orchestration and aggregation.

As part of the STU team I'm involved in the following:

- Establishing technical relationship with key architects (both Microsoft architects as well as Partner/Customer architects, including Microsoft Consulting Services).
- Drive partners and customers to clearly understand the role and the scope of CSF
- Drive partners towards understanding the vision of SOA and CSF, and that CSF is a new paradigm in implementing service aggregation and collaboration, independently of service platform, device and service provider.
- Work with Systems Integrator (SI) partners, MCS and implementation teams to ensure they are well positioned to deploy in time with quality.

- Provide effective and efficient facilitation of communication between the field force and the CSF product team.
- Relevant technologies: BizTalk, .Net, Visual Studio, CSF, Windows Server, etc.

SBC / IBM

Dallas, TX

Business Systems Analyst / Systems Architect / Consultant

January 2005 – Jun 2005

The IBM URD Team, as part of SBC's Project LightSpeed, is responsible for the development of business requirements, technical/systems requirements, use cases, design specification, and test cases for the Service Delivery Platform (SDP). The primary purpose of Project LightSpeed is the delivery of VoIP, Enhanced Broadband (HSIA) and Switched Video Services (IPTV) to the Consumer Market through deployment of fiber to the node (FTTN) and fiber to the premise (FTTP) infrastructure. The SDP (Leapstone and IBM components) acts as a service broker between the OSS/BSS Functions layer and the IPTV, VoIP and the HSIA services platforms, simplifying the complexity in the OSS/BSS layer by providing an integrated and consolidated method for service ordering, provisioning and activation.

As part of the Systems Engineering team I've designed and developed, as a team member or a project leader the following:

- Business specification and requirements for service ordering, provisioning, and activation, user management, content management, and service management
- Technical / systems / functional requirements and design specification
- Interface specification and high level design specifications
- Use cases and test cases
- Involvement with all aspects (various methods and methodologies) of Software Development Life Cycle (SDLC)
- Reviews with other team members to ensure cross-business units functionality of the new deliverables
- Provided consulting regarding the document and information structure for ease of readability, usability, coherence and traceability of the requirements.

AT&T / Tekmark

Middletown, New Jersey

Systems Engineer / Consultant, AT&T Labs – VoIP/CallVantage

November 2004 – January 2005

The VoIP / CallVantage team is responsible for designing and developing new features and enhancements to the CallVantage VoIP platform, enabling efficient and effective ordering and provisioning workflow to the appropriate backend systems, enabling rapid service delivery. As part of the Systems Engineering team I've designed and developed:

- Specifications and requirements for new features and enhancements, enabling ordering and provisioning.
- Systems architectures
- Functional interface specification and requirements to enable interoperability with other systems
- Reviews with other team members to ensure cross-business units functionality of the new deliverables

Involvement throughout the product/project lifecycle process: user and business requirements analysis, feasibility studies, Technical Service Descriptions (TSDs), systems and functional requirements writing, review and concurrence on design documentation and testing procedures, high level product support.

RUTGERS UNIVERSITY

New Brunswick, New Jersey

Ph.D. Student / Teaching Assistant

Sep 2003 – June 2004

SCILS – The School of Communication, Information, and Library Studies

Concentrated on finishing my PhD coursework; completed by the end of spring 2004 semester.

Also performed Teaching Assistantship (TA) duties for the following two courses. Teaching and delivery of course materials for both courses was augmented by the eCollege AU online teaching and learning environment.

- **Organizing Information** (masters level)
- **Retrieving and Evaluating Electronic Information** (undergraduate level)

TELCORDIA / ATS

Piscataway, New Jersey

Systems Engineer / Consultant, Telcordia Interconnect Services

February 2002 – June 2003

The Interconnect Services team is responsible for designing and developing new features and functionalities on various gateway products to enable customer's (e.g. ILECs) compliance with federal regulations to enable other telecommunication companies (e.g. CLECs) to access their OSSs. As part of this effort I've developed and designed, as a team member or a project leader the following:

- Specifications and requirements for new SGG (ServiceGate Gateway) features and enhancements (pre-orders and firm-orders validation), including Local Service Request (LSR) and LSOG standard
- Functional specification and requirements for SGG validations interfaces (XML) to enable interoperability with other systems
- Reviews with other team members to ensure cross-platform functionality of the new functionality
- Special care of legacy systems and open standards in regards to interoperability and interface compatibility due to migration from Telecommunication Access Gateway (TAG) to ServiceGate Gateway (SGG)
- Involvement throughout the product/project lifecycle process: user and business requirements analysis, feasibility studies, Statement of Work (SOW), systems and functional requirements writing, review and concurrence on design documentation and testing procedures, high level product support

AT&T / LTI

Systems Analyst / Consultant, AT&T Labs – BIP CC Dev.

Lincroft, New Jersey

September 2000 - January 2002

The Business IP Customer Care Development team is responsible for designing and developing new features and enhancements on the Clarify platform, used as a workflow manager for service ordering and provisioning, enabling service delivery. As part of the Clarify Systems Engineering team I've designed and developed:

- Specifications and requirements for new Clarify features and enhancements, pertinent to Customer Relationships Management (CRM) functionality as well as workflow management, ordering and provisioning
- Functional specification and requirements for Clarify interfaces to enable interoperability with other systems
- Reviews with other team members to ensure cross-business units functionality of the new deliverables
- Involvement throughout the product/project lifecycle process: user and business requirements analysis, feasibility studies, Statement of Work (SOW), systems and functional requirements writing, review and concurrence on design documentation and testing procedures, high level product support

ITXC Corp.

Senior Sales Systems Engineer, Internet Telephony

Princeton, New Jersey

January 2000 – September 2000

The sales systems engineering team is responsible for pre-sale and post-sale support of ITXC's sales force and its affiliates around the world. As part of the team, I've been involved in the following activities:

- Affiliate management and network architecture design related to the Internet telephony (VoIP) products and services
- Software and hardware IP to-from PSTN gateway setup, maintenance, and troubleshooting
- Pre-sale and post-sale technical support
- Capacity analysis in a mix environment of switch and VoIP based network
- Primary technical interface between customers and within ITXC's network operations
- Supporting the operations team in troubleshooting and resolving network problems
- Traffic pattern analysis and consulting

AT&T

Systems Architect / Consultant, AT&T Enterprise Architecture

Middletown, New Jersey

September 1998 - January 2000

The Enterprise Architecture is a CIO synergy team responsible for various end-to-end enterprise level Systems Architectures that span over multiple business units. As part of this effort I've developed and designed, as a team member or a project leader the following:

- End-to-end Call Detail Systems Architecture to enable the integration and consolidation of various acquisitions and mergers into AT&T's usage collection, rating and billing systems. Detailed attention paid to step by step migration from the old architecture (some legacy systems) to the target architecture, carefully resolving issues of interoperability, compatibility, and inter-exchange with relevant billing, service and element provisioning and inventory systems, as well as process re-engineering to reflect the new architecture.
- End-to-end Systems Architecture for the Voice over IP (VoIP) service offerings over the cable network. Researched various Call Agent solutions, set-top boxes and other VoIP equipment. Provided input to the RFI and RFP processes.
- IP Information Infrastructure/Architecture
- Call Center business case analysis designed to migrate the existing platform to more efficient Web based interactive call center platform.

BELLCORE - Bell Communications Research **Red Bank, New Jersey**
Engineer, Professional Services, ISDN Design and Engineering **May 1997 - September 1998**

The ISDN Team is responsible for the design and engineering of the ISDN network architecture, developing new features and services, enhance the existing features in accordance with the National ISDN Council (NIC) and provide operations support for the Regional Bell Operating Companies (RBOCs). Furthermore, members from the ISDN Team are fully engaged in various International Telecommunications Union (ITU-T) standards groups.

- Worked on designing and developing requirements and specification for new features and enhancements for the ISDN network architecture. This involves primarily layer 3 messaging and signaling protocols.
- Communicating with switch suppliers and clients to assess the market needs for the development of new features and enhancements.
- Designed and developed prioritization voting process to determine which features and/or enhancements should be included in the National ISDN platform release for 1999.
- Revised and reissued Bellcore's GR-301 Document, *Public Packet Switch Network Generic Requirements (PPSNGR)*.
- Published revision to Bellcore's TR-268 Document, *ISDN Access Call Control Switching and Signaling Requirements*.
- Organized and coordinated the writing our organization's proposals for 1998. The process involved extensive interaction with Bellcore lawyers in finalizing the final versions. Received a "Team Recognition Award".

Engineering Information Inc. **Hoboken, New Jersey**
Internet Consultant, Web Publishing Team, Ei Village **August 1996 - May 1997**

- Developed interactive Internet services to increase the customer base and ensure high level of customer retention.

Stevens Institute of Technology **Hoboken, New Jersey**
Instructor, Electrical Engineering and Computer Science **August 1995 - May 1997**

- Instructor: C++ Programming, Microprocessor Systems lab, Electronics and Instrumentation lab, Excel, Word, Mathcad and other commercial packages in DOS and Windows, Internet
- Technical writing: C++ Independent Study Modules
- Developed lecturing, testing and lab material

IBM - International Business Machines **Poughkeepsie, New York**
Consultant, SoftwareExcel Support Center **September 1993 - August 1995**

- Communicated with customers and software vendors to ensure timely and accurate implementation of customer's Operating System (OS) upgrades.
- Delivered technical reports by clearly identifying upgrade problems and therefore providing viable solutions

IBM - International Business Machines **East Fishkill, New York**
Testing Technician, After Thin Film (ATF) Testing Department **March 1991 - March 1992**

- Responsible for various inspections and surface tests on glass and ceramic chip technology
- Trained new department members
- Safety suggestions award

RELATED EXPERIENCE

- **Internet:** Telnet, FTP, Content Engineer, Home Page design, Mailing Lists Admin, Interactive Services Design
- **Programming languages:** C++, Rexx, Pascal, FORTH, HTML, Basic, Perl, Scripting, XML.
- **Operating Systems:** Linux/UNIX (sys. admin experience), OS/2, Windows /95/98/2000/XP, VM
- **Networks:** TCP/IP, LAN (Microsoft Windows 95/98/2000/XP), Ethernet.
- **Applications:** SPSS, MATLAB (toolboxes: Control, Image Processing, Signal Processing), Pspice, Mathcad, FrameMaker, Microsoft Office (Word, Excel, PowerPoint, etc.)

PROFESSIONAL SKILLS

Excellent organizational and leadership skills, Quick learner, Responsible, Team work, Self Motivation, Able to see the global picture, Flexible and able to work on multiple projects simultaneously.

CONFERENCES

Panel presentations:

- **Title:** "Towards a model of open source digital library system: The implication of open source software in the development of digital libraries"
Conference: ASIST 2004 Annual Meeting; "Managing and Enhancing Information: Cultures and Conflicts" (ASIST AM 04), Providence, Rhode Island, November 13 - 18, 2004
Panel title: Diffusion of Knowledge in the Field of Digital Library Development: How is the Field Shaped by Visionaries, Engineers, and Pragmatists? (SIGs HFIS, DL)
Panel participants: Marija Dalbello, Tefko Saracevic, Carole Palmer, **Mentor Cana.**

EDUCATION

Ph.D. Candidate, Information Science, The School of Communication, Information and Library Studies, The Graduate School of New Brunswick - **Rutgers University**, New Brunswick, N.J

Classes completed towards my Ph.D.:

- **Information and Communication Processes.** The nature of information and communication processes, and the role of information and communication in individual, social, and institutional behavior. Particular emphasis on the conceptual linkages between information and communication processes.
- **Research Foundations.** Concepts, methods and practices of social science research in relation to communication, information science and library studies
- **Human Information Behavior.** Precursors to, and characteristics of, human information seeking behavior, individual and social, both within and outside of institutional information systems. Relations between such behavior and information systems design and the relevant technologies.
- **Media History and Institutions.** This course addresses basic issues in the history of print and electronic media, emphasizing the media's political economy, the interrelationship of media and society, and the ideological component in writing history.
- **Seminar in Information Studies.** Major problems, trends and developments in information science and librarianship. Critical survey of current and classic research findings.
- **Information Retrieval Theory.** Examines the basic problems of information retrieval from theoretical and experimental points of view. Develops a basis for the specification of design principles for IR systems.
- **Towards a model of open source digital library system:** The implication of open source software in the development of digital libraries (an Independent Study). This study uses the theoretical and methodological framework provided by the actor-network theory and the open source software development framework to investigate the role of open source software utilization in the development of digital libraries.
- **Quantitative Research Methods:** Facets of research, problem areas, research techniques and experiments. Each student develops a research relating to a chosen topic.
- **Mass Communication Theory and Research:** Current mass communication theories and approaches analyzed from a research perspective. Topics include: critical theory; audience ethnography, uses and gratifications; socialization processes and effects; and agenda setting.
- **Qualitative Research Methods:** Qualitative approaches for examining communication and information processes, including information definition, acquisition, evaluation and use.
- **Experiment and Evaluation in Information Systems:** Measures, models and methods for macro-evaluation of impact of information systems within their environment and for micro-evaluation of performance of system components. Experiments - their design, conduct and results.
- **Current Research Issues:** Integrative treatment of fundamental assumptions, paradigms, and directions in contemporary research of information, communication, and information systems. Students develop a research design relating to a chosen topic.

M.S., EE/Telecommunication Engineering, Stevens Institute of Technology, Hoboken, N.J., May 1997

B.S., Electrical Engineering, State University of New York at New Paltz, New Paltz, N.Y., May 1995

PROFESSIONAL AFFILIATIONS

IEEE - The Institute of Electrical and Electronic Engineers (1996-2002)

ASIS - American Society for Information Science and Technology (Since 2002)

WORKING ELIGIBILITY

US Citizen

REFERENCES FURNISHED UPON REQUEST