

Professional Experience:

Q4 2009 - Present

Huawei Technologies

- **CTO and Chief Architect, SDP and Consumer Services, Applications and Software, (Huawei Software Company)**

October 2002 – Q4 2009

Oracle, Redwood Shores, CA

- **Chief Architect and CTO, Oracle Communications**
 - Responsible for
 - Inbound architecture (across CGBU products – OSS, BSS, SDP and AIA),
 - Technical strategy for CGBU wide + Oracle Fusion Middleware (OFMW)
 - Outbound architecture (Industry Evangelization, Customer / Field support and Partners) CGBU wide + OFMW
 - Communications standards across Oracle
 - At same time on assignment in JAPAC (Japan / Asia / Pacific) to steer JAPAC CGBU Field Activities (Sales, Pre-sales, Marketing) from Dec 2008 – June 2009, dotted line report to JAPAC GM
 - Train and Re-organize JAPAC CGBU field
 - Collect customer / market feedback on products
 - On the job training
- **Chief Architect and CTO, Mobile, Voice, and Communications, Oracle**
 - SDP in Oracle Fusion Middleware (OFMW) / Server technologies and now CGBU (Communications Global Business Unit)
 - Responsible for architecture and technical strategy for Communications Platforms aimed at Communications Service Providers (Telcos and others) and enterprises, including:
 - SDP in Oracle Fusion Middleware (OFMW) product architecture design, support and review.
 - End to end Telco strategy and architecture, including OSS/BSS/SDP integration (SDP/OFMW, EM, Siebel, EBS, Metasolv, BRM(Portal Software), NetSure, ERP, ...), based on Oracle “AIA for Communications” ++ design. This also include in-depth involvement, with evangelization, architecture and strategy support for Oracle CGBU (Communications Global Business Unit) and Apps (Siebel/MDM).
 - Technical support of business development, evangelization and technical review of potential partnership, acquisition, joint activities and customer engagement (RFXs, POCs) for SDP and end to end integrations.
 - Outbound evangelization of Oracle vision (SDP, SOA, end to end integration, AIA/SDF, Pragmatic IMS, Convergence, Service Layer for Telcos, ...) with numerous papers, talks and seminars (including some with record setting attendance or recipients of best session awards).
 - Some key achievements
 - “Father” of Service Delivery Platform (SDP) architecture, strategy and execution targeted to Telcos and Service providers as well as enterprise / internet. Vision drove SOA design like OMA OSE and TMF SDF.
 - Gain industry support for OSE vision of an IT SOA based blueprint to service provider service layer environment (and relationship to network layers, IMS etc for example).
 - Business plan, vision and strategy that created Oracle SDP activities around OSE as

new middleware activities and resulted into several acquisitions (and refusals).

- Key strategy and argument based on end to end OSS/BSS/SDP integration that resulted into “AIA for Comms” then Oracle AIA across Industries, influenced TMF SDF and resulted into the biggest SDP deal ever closed in the industry.
- Support of sales / field and closed many key deals for SDP and CGBU (even before the SDP activities were in place or when most did not believe in them). Meet many customers, partners, analysts and competitors...
- On the way to getting SDP/Communications strategy in place:
 - Reshaped Oracle Enterprise Wireless, Telephony, RTC platform (Real Time Collaborations), tools and applications like OCS (Oracle Collaboration Suite) around Standard technologies (SIP, RTP, HTTP, VoiceXML, ...). This included:
 - Setting a new strategy and consolidating all telephony/voice activities at Oracle
 - Driving an open standard Mobile Email strategy, business case, industry evangelization and standardization that resulted into Lemonade/P-IMAP, support of OMA Mobile Email Enabler (MEM), now close to completion, widely supported and considered as the next generation standards for email.
 - Cleaned up as Architect the Oracle Wireless AS, OCS Mobile and Oracle Lite stories and consolidated them in OFMW, OCS (see above) and Oracle DB
- Responsible for coordinating, representing Oracle and driving Communications standards across Oracle (including OMA, IETF, 3GPP/2, Parlay, OSGi, TMF (SDF), JCP (e.g. JSR 116/289/309), IEEE NGSON, SIP Forum and relevant activities at W3C, OASIS, Liberty, WS-I, etc.), as well as industry initiatives (Mobile Email Interest Group, IT/Operator Forum), Chair OASIS TMS, OMA Board of Director (till 2006, again for 2 years starting Dec 2008) .
- Active member of Oracle ARB (Architecture Review Board), ASG Core (Architecture Steering Group) + chair of Communiactions, SDP and Standards working groups, ASSC (application Standards Steering Committee), Corporate Standard Leadership.

1995 – September 2002

IBM T.J. Watson Research Center, Yorktown Heights, NY

- **Research Lead for Wireless Computing Standards and Technologies**
- **Lead of the IBM Pervasive Computing Strategic Framework Architecture Project**
- **Research Staff Member Manager**
 - Led Research Wireless Computing Task Force (Research, Pervasive Computing Division, IGS, Communications Sectors, Technology Group)
 - Managed architecture, standards (OMA, IETF, 3GPP, 3GPP2, etc.), and research activities on ASR, TTS, NLU/NLG and Biometrics (especially Speaker recognition)
 - Spearheaded the research strategy for wireless standards and technologies and its implications for wireless e-business, contributing directly to IBM’s Pervasive Computing Strategic Framework in terms of standards, architectures (e.g. design of SPDE proposal) and technologies
 - Initiated IBM’s interest and support for multimodal computing, and led IBM’s end-to-end multimodal strategy
 - Managed a worldwide virtual team to perform research, deliver prototypes and product components for the Pervasive Computing and Research EBO (Emerging Business opportunity) divisions: Biometrics, Voice, Multi-channel and Multi-modal technologies
 - Evangelized IBM’s strategy and products to target customers and partners
 - Co-inventor/designer of SpeechML (IBM contribution to VoiceXML Forum), speech browser and XForms
 - Chair of IBM Multimodal Standard Board (IMSB)

1994 - 1995

AT&T Bell Laboratories, Murray Hill, NJ

- **Member of Technical Staff**
 - Researched robust speech recognition and acoustic and auditory modeling

Additional Activities

2008 – Present

Kaqquru (Stealth mode)

- Co-Founder and CTO

Advisor

- Qik.com (Strategy, Product Features, Telco landscape and Positioning, Architecture, Advisory Board)
- UEWHOO (Advisory Board – Stealth mode)
- Primary Insight – Bear (Expert Consultant)
- Patent technology expert

2000 – 2008

Advisor

- Several start-ups

1993 – 2001

GEI (Global Environment Institute) (non-profit international educational organization)

- Co-Founder, Board Member and Curriculum Manager

UCL

- Invited lecturer on signal processing and Conversational / Multimodal technologies

ISU

- Invited lecturer (Space Engineering / Satellite Studies)

Technical Achievements

Over The Years:

(non exhaustive)

- More than 190 published pending and granted patents, with 120+ granted and 45+ additional pending but not yet published patents:
 - One noted in MIT Technology Review as top 5 patents
 - Several patent licensed and providing significant licensing streams to IBM
 - Awarded title of “Master Inventor” at IBM
 - Several IBM corporate, divisional and supplementary awards
 - Research division award to speaker recognition activity / group and patent portfolio granted in 2008 for contributions that were made...
 - In October 2008, IBM accepted (despite me having left since 2002) the work done on Conversational Biometrics as a 2008 IBM science accomplishment; a very prestigious award at IBM.
- Winning laureate of WTN (World Technical Network) for Software Category 2004
- Laureate for WTN 2009 for work on IT for Telcos in Software (individual and corporate categories)
- Author of numerous scientific papers, books and scientific presentations (peer reviewed journals, conferences), industry talks, presentations and keynotes as well as internal white papers, technical and strategy proposals and design specifications
 - Including some seminar/webinar with record setting attendance (e.g. > 2500 for SDP TMF Webinar) or recipients of several best session / papers / talks awards
- Some key design, industry initiatives and inventions:
 - AIA (for Communications) that us SOA/EDA based and inspiring the OSS/BSS/SDP integration and additional concepts beyond AIA (service level charging, subscription management delegation to OSS/BSS, Unified User profile, metadata for dependency characterization, resource management enablers, ...). Drive as a result the design of TMF SDF
 - OSE as service layer blueprint for service provider and based of SOA based SDPs and the notion of enablers and specific enablers (PEEM, Profile, Presence, Call/media control, media server control, voice access, charging, ...)
 - Service provider delivery platforms (IBM SPDE, Oracle SDP, OSE, ParlayinOSE, IMSinOMA)
 - SIP/HTTP/J2EE integration (JSR 289 and beyond along with views on a better design) and Telephony/voice platforms
 - Carrier-grade J2EE and use of distributed cache a la Coherence for HA across multiple protocols
 - Service-level SCIM,, context and routing as well as Service level telephony AS abstracted

from network and with SOA based call / session control

- Policy enforcement workflow, orchestration and service gateway/ rule engine and business rules factorization (PEEM, BPEL, Rule engines) and SCA (Service Component Architecture)
- P-IMAP / Lemonade for open standard mobile email and resulting IETF Lemonade
- Multimodal and conversational technologies: Multimodal and multi-device authoring, middleware and execution model, Interaction markup language and multi-channel technologies, XForms and Device Independent Authoring
- SpeechML (IBM submission to VoiceXML) / Conversational ML and conversational browser: father of VoiceXML and of resource management protocols
- Expert on Text independent speaker recognition, speech biometrics and ASR/conversational technologies
- Fundamental impacts on companies product, strategies and organizations. A few examples include:
 - New Activities:
 - IBM Biometrics, IBM Embedded Speech, WebSphere Voice Server and Telephony Server, Multi-channel, multimodal /conversational computing, SPDE
 - Oracle Push Email, OCS RTMS, Oracle SDP activities, Oracle AIA, IdM/UUP for Telcos, RT / CG Container and SOA
 - Organizations:
 - IBM: DT6000 => Websphere Voice Server (VoiceXML) + Speech Groups => Software Group: AIM then PvC
 - Oracle: All Oracle Telephony / RT / Email => OCS; All Telco MW (e.g. Wireless AS, RT / Telephony in OCS) => OFMW SDP; SPD + BEA => CGBU

Education:

- 2008: **Landmark Forum**, Landmark Education.
- 2000 -2001: **IBM, MBA Program** (Tailored for IBM Research / Technical Executives) - Offered with NYU
- 1990–1994: Université Catholique de Louvain; Belgium (UCL) and CAIP, Rutgers University, Piscataway, NJ (Visiting Scientist) while Research Assistant for prestigious Belgium National Fund for Scientific Research (FNRS)
 - **PhD in Science - Physics & Electrical Engineering** (With Highest Marks)
 - **DEA** (Diplôme d'études approfondies) in Telecommunications (UCL) – 1991 (Attended)
 - **DEA** (Diplôme d'études approfondies) in Physics (UCL) – 1991
 - **ISU Space Studies Degree** – International Space University (ISU) – 1991
- 1985–1990: Université Catholique de Louvain; Belgium (UCL)
 - **Diplôme d'Ingénieur Civil Electricien** (M.S. and B.S. in EE) (1985-1990) (With Highest Marks)
 - **MS and BS in Physics** (1986-1990) (With Highest Marks)

Some Relevant Skills:

- Unique ability to rapidly design “the right way”, from the onset and be proven correct on key principle and close on detailed proposals. At the same time, unique ability to almost immediately detect “wrong designs”, from the onset and often be proven correct.
- Expertise in many domains, with strong academic background / degrees, industry visibility and credentials, publications, achievements and patents).
- Very broad deep technical skills resulting into unique analysis, design and plans of attack and sometimes very impressive / disconcerting for unfamiliar parties exposed to it.
- Believe in designing with a strategy and a plan to execute on a vision and with a clear purpose and understand that success takes time and commitment: plan must be flexible but remain consistent to win.
- Can convince, gain and negotiate many interested parties, including opponents to align with strategy or plan. Very good in any argumentation or presentation with consultants, customers or

event competitors/skeptics: can sell anything that makes sense, if believe in it. Grand Communicator with Customer, Partners, Competitors and in Industry fora and events (as well as internally to staff and management).

- Experience at Management / Employee or Team growth (Had ~ 25+ directs at peak at IBM) with many dotted lines. Today at Oracle, I try to work with short team and whole groups/projects/products dotted lines. I have add several former VP Engineering, Chief Architects and CTO (even from publicly traded companies) reporting to me.