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Summary & Bio

Stephane H. Maes is CTO and CPO, ESM/ITSM/ITOM at IFS, and member IFS SLT (SVP level). He shares a lot of his time with R&D (30% as Chief Architect) as well as (30%) with the field, customers and Industry activities to then, as CPO, contribute technical strategies and product management (30%) and disruptive innovations brought to market (10% AdTech/Research). He is an innovator and disruptor that pragmatically delivers, starting from what is available, on changing industries, creating new markets and products, or turning around / transforming portfolios.

Dr. Maes approach is often to innovate and disrupt while delivering the unexpected while starting from what is available today. He significantly changed industries several times and with big impact on systems that everybody uses every day, new markets and new opportunities for the companies he was part of. Besides creating new opportunities, he has a track record of turning around or transforming businesses based on new technology, evolutionary transformation or disruption. He can be as hands-on as needed when needed and lead any size of international technical teams (PhDs, Architects, Developers / R&D), and development/engineering projects (in-house and off shores or outsourced).

A seasoned technologist and leader, Dr. Maes is an expert on Web, Cloud, IT, AI, Autonomous Computing, DevOps, Life Cycle Management, Middleware, Service Delivery Platform (SDP), Telecommunications, Mobility, Internet of Things / Machine2Machine, Integration and Service Oriented Architecture (SOA) / Micro-service Technologies as well as service layers for Communications, Cloud and Pervasive Computing, Conversational and Voice and Multi-modal Technologies. He has more than 25 years of experience in the high-tech industry. Prior to joining IFS, he held Research then Management and VP / CTO positions at AT&T Bell Laboratories, IBM, Oracle, Huawei, Ericsson and HP/HPE/Micro Focus. He has been responsible of Worldwide R&D teams as big as 6500 people and CTO for businesses as big as 3.5 Billion US dollars revenue annually. He has more than 275 granted patents and many on-going pending applications.

Additionally, Dr. Maes is and has been a technical advisor and co-founder of several startups where he has often helped define key disruptive winning strategies and offerings. He has authored numerous papers and frequently speaks at scientific conferences and at industry events. He has also been involved in many industry activities (Standard specifications and Open-Source initiatives).

Dr. Maes holds Bachelor and master's degrees in Physics and in Electrical Engineering from UC Louvain (UCL), Belgium, an IBM Research MBA and a Ph.D. in Theoretical Physics and Electrical Engineering from UCL, partially obtained while a Visiting Scientist at CAIP, Rutgers University. On the side, Dr Maes continues some pure Research and contributions in these areas.

Career Objectives, Interests and Skills

Roles: CTO, (S)VP (Strategy, R&D, Innovation, Engineering, etc.) or learning to drive as GM. Alternatively Board Member (of Advisors or Directors).

Interested in: Research, Innovation, Fixing existing portfolio with a winning innovative and disruptive strategy built on what exists (i.e. technical turn-around expert), new products or markets, Taking over the world!

- **A unique Combination of expertise:** Software development, (Quantum) Physics, EE, Software Architecture, AI, Conversational, Multimodal, Cloud, Cloud Native, IT, Internet, Mobile, IoT, Telecoms, Networks, Middleware, Developer tools, ITOM, Dev-Sec-Ops. Leading (all size) international technical teams (PhDs, Architects, Developers / R&D) and R&D/Engineering projects.

For more details, including endorsements and recommendations, see <https://www.linkedin.com/in/shmaes>. Latest material derived can also be found at <http://www.stephanemaes.com/smaes/> (detailed resume, short resume, Example of Technical CTO accomplishments, Bio)

Experience

Current (all):

CTO and CPO (SVP Level)

IFS

Aug 2021 – Ongoing (USA, UK)

- CTO and CPO for ESM/ITSM/ITAM/ITOM
 - Product owner, Head of PM, R&D, Architecture and Strategy for Assyst portfolio / IFS Service Management (i.e. product management, development/execution, planning short term tactics, long term strategies and vision).
 - IFS Assyst and ITOM Modernization (UX/UI, New Features, re-Architecture for Technical Debt, new features, and cloud native convergence with IFS cloud), Transformation of portfolio, Architecture and Integration with IFS platform and capabilities: IFS Cloud (e.g. CRM, ERP, Enterprise applications). IFS Assyst, including ITOM, started as next generation of the Axios System portfolio, post-acquisition of Axios Systems by IFS.
 - Turning around portfolio, building up R&D team and portfolio and pushing IFS assyst to become a leading product in the ESM, ITSM, ITOM market and in analysts ratings.
- Member of IFS SLT (Senior Leadership Team) – IFS R&D SVPs
 - All IFS R&D and PM, processes, plans and operations
 - ESM and IFS Cloud convergence and transformation (e.g. ESM impact on transformation of EPR, CRM, FSM, EAM): driving the disruption with the only company to have all the pieces (ESM, ERP, CRM, EAM,...).
 - Direction and vision: ESM as front-end and orchestrator of Enterprise and Industry Applications, and, with AI and smartness, ESM as enabler of the “Autonomous Enterprise”.

Member Of The Board Of Advisors

FactWise

Aug 2019 - Present (1 year 6 months +)

AI based eCommerce / services focused initially on few vertical industries (e.g. initially CBD, Cosmetics etc.; now: dental, urgent care and medical groups).

Main contributions: Input on Pitch, Strategy, business plan and design for initial AI-based Trusted marketplace then for pivot to healthcare AI-based trusted advisor for consumer Healthcare needs; Design and IP generation

Member (User)

CNCF [Cloud Native Computing Foundation]

May 2019 - Present (1 year 9 months +)

Co-Founder at Spoton (Stealth)

Spoton.ai

Nov 2017 - Present (3 years 3 months +)

Community travel concierge advises and just-in-time solicited local advertisement.

Co-Founder, CTO, R&D Head; Prototype, Pitch, Business plan – Awaiting right time to Debut. On-hold with Pandemic

CTO and Co-Founder

Stealth Serverless Functions

Apr 2019 - Present (1 year 10 months +)

Awaiting right time to Debut.

Advise on Concept, Strategy, Opportunity, Pitch, Business Plan and Technology. On-hold with Pandemic

Member

OpenStack

Apr 2012 - Present (8 years 10 months +)

Member Of Board of Advisors for several Start-ups

Various Start-ups

Feb 2016 - Present (5 years +)

Various stages

Advise on Strategy, Opportunities and Design/Technology (Often à la Acting CTO)

Independent Researcher

(Personal Activity)

Jan 2012 - Present (9 years 1 month +)

Research on gravity emergence from quantum entanglement and implications on Standard Model, Foundations of Physics and more.

Member, Fellow & Laureate - WTN - World Technology Network

WTN - World Technology Network

Jun 2004 - Present (16 years 8 months +)

Laureate (Individual) for personal contributions to Software (IT Software) for Biometrics work

Laureate for Corporate IT software contributions for driving standard mobile email (Oracle)

Member

IEEE

Jan 1987 - Present (34 years 1 month +)

Member

FABI (Belgium)

Jun 1990 - Present (30 years 8 months +)

Belgium Federation of Engineers

Member

AILv

Jun 1990 - Present (30 years 8 months +)

Association des Ingénieurs sortis de Louvain (Alumni Engineers from UC Louvain)

Experience

Past (Main Employment):

Chief Technologist/CTO and Distinguished Technologist, IT Operation Management (ITOM), Micro Focus

Micro Focus

Sep 2017 – Aug 2021 (3 years 11 months)

(Position resulting from Spin-Merge of HPE Software with Micro Focus completed on 9/1/17)

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

“Transformed the business from disrupted incumbent with mostly on-premise legacy products for central IT to a modern cloud native flexible set of pre-integrated suites able to win against disrupting competitors” and introduced AdTech and innovation within Micro Focus as a way to win business and help customers.

Main Highlights:

- With CTO team, delivered strategy and architecture for modernized and Transformed Portfolio (50 legacy products to 5 suites, cloud native (on-premise, cloud, SaaS, MSP) and turned around its competitiveness. Evolved suites architecture and features to be deployed on clouds (AWS, Azure, ...), Managed K8S (OpenShift, CNCF K8S, AKS, EKS, GKS) and SaaS (Multi-tenant option designs, IDM evolution, SaaS vs. MSP use cases, data streaming on-prem to SaaS). Designed and drove ITOM beyond AIOps: AI4IT (Autonomous IT, No Ops or low touch IT/Ops) across ITOM Service Assurance and ITSM/ESM). Planned for SMAX / HCMX ESM to better compete against Service Now and convert SM accounts to SMAX. Contributed key principles to IT4IT (Open Group). Many corresponding patents. Put together strategy and plans for ITOM in 5G and IoT and Edge, as well as fomented the coming disruption by ESM, ITOM, and AI4IT, of CRM/ERP (in Enterprises), and OSS/BSS (in Telcos).
- Turned around numerous key complex / major customer accounts (Usually multi-suite customers). Turned around numerous key complex customer accounts. Led relevant R&D/engineering project delivery.
- Containerized suites have with agile release every 3 months (and variations).
- Modern (container, Cloud Native, micro-services) and agile product transformation along with smooth migration
- Strategy, transformation and product design to defend business against competitors (e.g. ITSM/ESM against Service Now and Service assurance against Splunk and AIOps players); AI4ITOM as strategy for new credibility

in a new market, SaaS offering (ESM, AIOps/Service Assurance) and OPTIC platform as SaaS (and on cloud).

- Innovation: e.g. (pre-integrated) suites vs. product, cloud native from monolithic, Hybrid deployment (on-prem, cloud, PaaS) & multi use cases (Enterprise, SaaS, MSP) with same portfolio; IT4IT and AI4ITOM (Self driving IT as next step beyond AIOps); many detailed strategic (e.g. from single tenancy to multi-tenancy for SaaS and MSP with same products) and feature contributions (e.g. smartness/ AI for ITSM then ITOM) to improve product or support strategy and transformation. Transformed the Micro Focus (MF) approach of having the “old working with the new” to also define the new and target new spaces (e.g. Self-Driving IT/AI4ITOM, ITOM for IoT, ITOM for Telcos, 5G, Edge, IoT). Inventor, reviewer and mentor for IP / Patent generation
- Evangelization: Support a strategic outbound marketing strategy, message and collaterals; Industry activities (Open Source e.g. OpenStack, CNCF, Standards: e.g. IT4IT)
- Outbound: Work with field and with key / lighthouse customers to understand their situation, recommend best way forward, streamline delivery and deliver successfully; feedback and coordinator (sole point of contact) with R&D, PM and “delivery arms” to coordinate commitments and inclusion in product roadmap as suitable, resolution of issues and proposed plans. Results: Turned around several major customers to be delighted with MF, adopt latest releases, deploy new suites and renew. Especially focused on helping cross portfolio, going to the cloud, porting to a specific cloud, integrating cross suites and when confronted with new use cases, requirements or constraints. Success also drove innovation or new product features with repeatable value against competition.
- Across MF coordination (Technical Leadership Community, TLB): e.g. Container, Identity Management, SaaS/MSP, Platform, reuse/tech sharing; Coordination with SUSE (SUSE for ITOM and ITOM for SUSE).

VP-level role + Distinguished Technologist technical level

Key Offerings: ESM: SMAX, SAM/AM, CMS/UCMDB, SM, HCMX (CSA), OO, RPA; AIOps: OpsB, OBM, COSO, OBR, OBA, SiteScope, APM, App Pulse, NOM, DCA, SA; Foundations: CDF, IDM, COSO/ODL, reporting (BVD, Vertica, IDOL, AI) Integrations, OPTIC Platform

Micro Focus Exec Superstar 2018 Award

Member of the Board of Advisors

Peritus.ai

Sep 2017 - Present (4 years 5 months)

A "The Hive" company (Hivedata.com). AI driven solutions for Support solutions.

Main Contributions: Advise on Industry, Market Opportunity and Offering requirements; Reviews of designs.

Left to avoid conflicts of interest

Member of The Board of Advisors

BidCRM

Sep 2017 - Present (4 years 5 months)

Integrated CRM and Marketing SaaS - Current used to support a eCommerce subsidiary (UltraCart in India)

Main Contributions: Input on Strategy and Business plan. Contribution and Review of Design. IP and Patent generation. Left to avoid conflicts of interest

Member HPE SW TRC

Hewlett Packard Enterprise

Jan 2017 - Sep 2017 (9 months)

Technical Review Committee - Across HPE Software Chaired

Coordinator of technology updates across BUs

CTO, TSO, Automate-Orchestrate-Transform to the Cloud, ITOM, HPE Software

Hewlett Packard Enterprise

Sep 2015 - Aug 2017 (2 years)

HPE SW spin-merged with Micro Focus on 9/17. Was HP Software till 9/2015

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

ITOM TSO (Technology and Strategy) Technology Strategy and Architecture for ITOM (IT Operation management) Automate, Orchestrate, Transform

Highlights: Delivered strategy and design to combine disparate products into pre-integrated suites. Strategy for Autonomous computing, Using containers and Managing Hybrid/Cloud native and legacy. Convinced company and transformed portfolio to as set of pre integrated suites; Container and Cloud Native management strategy; using

Containers for our product. Evangelized Autonomic computing; Designed IT as a service broker and Integration framework (Propel/Service exchange) used across all ITOM across products and suites. Evangelized SaaS Strategy for ITOM and containerized approach. Designed offerings for MSPs and CSPs (Helion networks etc.). Competitive features (smartness, migration from older product, coexistence, policies, placement, Day-2 management, bare metal management, migration to cloud) and strategy for CSA (Cloud Management) and ITSM to fightback against disruptors like Service Now. Setup of A-team for AdTech and Customer engagements, ITOM and NFV

Chief Technologist and Distinguished Technologist / Strategist

Hewlett Packard Enterprise

Mar 2012 - Aug 2017 (5 years 6 months)

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

Executive (VP level)

CTO and Chief Architect for Cloud and Automation Management BU (e.g. SA, OO, Client Automation). Since March 2013, role expanded to ITSM then ITOM.

HP DT (Distinguished Technologist)

Key Outcome: Refreshed portfolio for Cloud (and legacy data center) Management and Automation; Coordination with ES and Server and Cloud divisions; Innovation of Propel service exchange and Portal with Catalog aggregation (i.e. common data model, integration and UI resolution across portfolio); Many patents, patent reviewer and coordinator.

Chair of CTO Board - ITOM and ADM, HP Software

HP

Jan 2014 - Sep 2015 (1 year 9 months)

CTO and Chief Architect, Cloud, Automation, Management - IT Service Brokering, ITOM HP Software

HP

April 2012 - Sep 2015 (2 years 4 months)

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

Since 2012: CTO Cloud and Automation Management (Cloud, Data Centers, Servers and Collaboration with HPE Cloud): CSA, OO, DMA, SA; OpenStack strategy for HP Software and role in HP wide Cloud; DevOps (Coder/ADM)

Since Mid-2013: Adding IT as service broker, ITSM, and integration with whole ITOM to CTO responsibility

OO Open sourcing

OpenStack contributions

Key concepts of Common data model, APIs, similar UI and integration. Co-created foundation of IT4IT standardized and Open management Group.

VP and Chief Architect, Multimedia BU (BMUM), Consumer and Business Applications

Ericsson

Apr 2011 - Mar 2012 (1 year)

US based (San Jose) team WW and management in Sweden (Kista/, Stockholm)

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

CTO for all Software products other than BSS World Wide plus Americas and South East Asia

Highlights: Re-architect and consolidate portfolio around a coherent offering of a modular platform and defended Ericsson #2 marketplace position in SDP despite very limited resources, First NFV implementation (IMS), Key PoC on IoT/M2M with customers.

Key product: MSDP, ECE, MiO, MSP, eStore, MLP, ADC, TV, mHealth, M2M, RBT, RCS(-e), ICCE/ UVP, BCS + IMS Virtualization/NFV

Supported numerous key accounts and wins (especially in regions like North America, South East Asia/Oceania, Middle East and India)

Cross Ericsson activities and representation of BMUM.

Cloud service and cloud infrastructure programs

M&A and partnership

VP of Software Architecture, Technology Strategy and Planning, Futurewei US/ North America R&D

Huawei

Oct 2010 - May 2011 (8 months)

US Research Center

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

(Promoted Oct 2010 to additional role / VP)

Co-created NFV for Huawei (pushed at ETSO MANO), Huawei IoT strategy and the concept of Telco cloud (on Eucalyptus and AWS).

CTO and Chief Architect - SDP and Consumer Services, Applications and Software

Huawei

Sep 2009 - May 2011 (1 year 9 months)

US based – Worldwide role for Division in Shenzhen.

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

CTO and Chief Architect for R&D: SDP and Consumer Services, Applications and Software, (Huawei Software Company). Covered SDP, Services, OTT services, Applications, IPTV, Digital Home, RCS, NGIN and Technical Alignment other BUs

Highlights: Redesigned SDP to make multi-national solution workable. Brought Huawei to #1 to SDP and IPTV with strategy of IPTV/Sip on SDP; First and Sole vendor of Multi-national SDP (operators across countries) and Offered Cloud Operator and SaaS versions; Pushed to enter Enterprise market. It was executed and in 2012 it generated \$7.2B!

Enabled field world-wide and closed many deals all over the world.

Coordinated Standard activities and industry evangelization.

Chief Architect and CTO, Oracle Communications Global BU (CGBU)

Oracle

Sep 2008 - Oct 2009 (1 year 2 months)

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

Responsible across CGBU products – OSS, BSS, Network Intelligence, SDP and AIA) and - Oracle Fusion Middleware (OFMW) (with focus on Telcos/ Communications) for Architecture, Technical strategy and Outbound architecture (Industry Evangelization, Customer / Field support and Partners) CGBU wide + OFMW as well as Communications standards across Oracle

At same time on assignment in JAPAC (Japan / Asia / Pacific) to steer JAPAC CGBU Field Activities (Sales, Pre-sales, and 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; Proposed and pushed through acquisition of Convergin

New/(re-)architected converged charging (Real time, online/Offline, prepaid and postpaid) solution for BRM built around usage of MW (OCCAS)

Numerous patents, papers and awards

Cloud OFMW Architecture Advisor

Oracle

May 2009 - Sep 2009 (5 months)

Advisory role on Cloud Computing architecture and strategy for OFMW products and Oracle in general. Work on vision for Oracle Cloud and PaaS.

Chief Architect & CTO, Mobility, Voice, and Communications (OFMW)

Oracle

Jan 2006 - Feb 2009 (3 years 2 months)

Promoted CTO in 2007

Chief Architect, Chief R&D Outbound / Chief Tech. Evangelist- Chief Technology Strategist, Chief Innovator: (30%, 30%, 30%, 10%).

Inbound (R&D), outbound (field, customers, industry, standards) for SDP, Oracle Fusion Middleware

Key highlights include:

- Push for SDP / Telco business to be part of OFMW to use the same stack; SDP design, delivery and strategy brought Oracle to #1 IT vendor for SDP.
- 2007: Design of AIA (Application Integration Architecture) - SOA integration of existing Oracle offerings as main strategy to combine products while waiting for Fusion Apps. SDP design, delivery and strategy brought Oracle to #1 IT vendor for SDP; Proposed AIA (Application Integration Architecture) as a PoC for a customer: Became largest deal ever with Oracle (\$10B Oracle first over 10 years) and a new product group (it is how Oracle integrated all its apps and acquisition while awaiting Fusion Apps).
- Co-design of Next generation Converged Communications / Application Server on WebLogic: SIP/ HTTP/Telco Protocols + Service broker with EDA + OSGi Bundles
- Winning proposal to Oracle Executive management of SDP strategy and business plan followed by operation/execution including integration, development, sales and M&A (Proposed and made case for HotSIP, Net4Call, and Convergin) that successfully brought Oracle from a few mobile / WAP and messaging deals to the #1 in 2009 in SDP MW market shares...
- Architected re-organization and transfer of SDP Business after BEA acquisition to CGBU + OFMW coordinated activities (with Larry overwriting Safra Catz).
- Numerous patents (Including OTT Continuity, Charging and Policies), awards and papers
- In 2008, during exploratory discussions, presented to Google an approach to become a WiFi and no roaming cellular virtual operator using Google Voice, Oracle's "pragmatic approach to IMS" and OTT Continuity. This anticipated today's Google Fi Project
- BEA due diligence for Telco vertical

Chief Architect, Oracle, Mobile Voice and Communications

Oracle

Sep 2002 - Jun 2006 (5 years 10 months)

Promoted CTO in 2007

Chief Architect (Sr. Director) for Oracle Mobile then Chief Architect for Oracle Collaboration Suite (Mobile, Voice and Real Time), then OFMW to create SDP BU and offerings

Highlights: SDP design and Standardization; Many customer engagements and wins; Standard representation and coordination + industry events; Pushed standardization of mobile email at OMA and IETF: Google and apple were first adopters before iPhone and android (and Blackberry lost as market moved to ecosystems and touchscreens: this is why you probably do not use a Blackberry anymore!); Plotted and succeeded at re-organizing Oracle Mobile into OCS and then OFMW; Numerous patents and awards.

Architecture, Standards and Strategy

IBM

Jun 2001 - Sep 2002 (1 year 4 months)

On-loan from IBM Research to IBM Software, Pervasive Computing Division

Strategy/architecture for use of Pervasive Computing and AIM (WebSphere) for Telcos

Co-design of SPDE (First IT/SOA Service Delivery Platform (SDP)) on WebSphere Middleware: created SDP and SDP market at IBM, become IT#1 at Oracle, Absolute #1 at Huawei and defended #2 at Ericsson.

Research Staff Member Manager

IBM

Jul 1995 - Sep 2002 (7 years 3 months)

Promoted RSM manager in January 1998 and Master Inventor in 2002

Highlights: Managed worldwide team of as many as 50 people

Convinced, from Research, IBM Software division to adopt my strategy to go with Websphere Voice Server with VoiceXML and SIP (and Abandon DT6). Today this is adopted by all IVR (i.e. the push one or say one telephony

systems)

Research in speech and speaker recognition, Biometrics, Conversational systems, Multi-channel and Multimodal systems, LVCSR, Stochastic NLU/NLP; Co-designed SpeechML that became basis for VoiceXML, iML/CML as multimodal and conversational ML (bases for XForms) and Multichannel/Multimodal blueprints (MVC) bases for multimodal solutions, Multiscreen, Device independent authoring and Portal/portlets (WSXL); Worked on ViaVoice and embedded engine for Palm Pilot and Car; Created Multimodal and speech browser and drove strategy to evolve IBM IVR to a design of WebSphere Voice Server (VoiceXML) and Telephony Server (SIP); Invented CVM - Conversational Virtual Machine as a multimodal/conversation UI and OS (see Siri and iOS or Android analogs Today: they borrow key features); Key concepts of SLA enforcements, Policies, Utility Computing and Autonomous Computing / Autonomous systems that IBM then spearheaded; Invented Conversational Biometrics; Invented DSR (Distributed speech recognition) with specs at 3GPP and a DSR coding standard at IETF (RFC)
Numerous patents, papers and awards: many virtual assistant and smart speakers license my patents today.

MTS

AT&T

Sep 1994 - Jul 1995 (11 months)

Acoustic processing Department

Original Bell Labs – Before Split. Technically part of AT&T and Lucent Technologies which is now Nokia. Department went mostly with Lucent.

Research on Signal / Speech processing under adverse noisy conditions

Lecturer / TA

International Space University

Jun 1994 - Sep 1994 (4 months)

Space Engineering at UAB (Barcelona)

Faculty

International Space University

Jun 1993 - Sep 1994 (1 year 4 months)

SSP (Remote sensing/satellites) projects and Engineering Departments

Research Associate

Université catholique de Louvain (Now, UC Louvain)

Sep 1990 - Sep 1994 (4 years 1 month)

Jointly at Department of Telecommunications and Hyper Frequencies (TELE), EE, FSA (Faculty of Applied Sciences) and Department of Theoretical Physics (FYMA), FS (Faculty of Sciences), UCL, Louvain-la-Neuve, Belgium

Research on Wavelet Transform and Sub-band coding for HDTV for signal processing (including MPEG 2 and 4 standardization - Competing standards vs. DCT), image and video compression (lossless, lossy, perceptually lossless or optimally lossy) and speech / speaker recognition)

TA for numerous Physics, EE and Engineering lectures

Research Associate (FNRS)

Fonds National de la Recherche Scientifique

Sep 1990 - Sep 1994 (4 years 1 month)

FNRS: National Fund for Scientific Research, Belgium - Most Prestigious Belgium Research and Grant Organization

- Research Associate working for FNRS at UCL (Belgium) in TELE (Department of Telecommunications Engineering) and FYMA (Department of Mathematical Physics) and at Rutgers University, CAIP Department

- Lecturer for Physics and Electrical Engineering Departments

Student Electrical Engineering and Physics

Université catholique de Louvain (Now, UC Louvain)

Jun 1985 - Jul 1994 (9 years 2 months)

Bachelor in Engineering, Master in Electrical Engineering (UCL 1990)(Specialized on Solid States Physics, Electronic Circuits Design (FAI), Hyper frequencies, Telecommunications and signal processing (TELE))

Master Thesis: Modeling of Quantum Well Structures DEA in EE - Telecommunications (UCL 1991).

Bachelor in Physics, Master in Physics (Theoretical Physics) (UCL 1990) Master Thesis:

Physics of Quantum well structures

DEA in Physics (UCL 1991)

PhD in Theoretical physics / EE on. Thesis: Wavelets, Subband Coding and Speaker recognition

(UCL and Rutgers University - 1994) - Included work also on speech and speaker recognition, wavelet transformation and HD TV Encoding (Subband Coding proposal for MPEG-2)

Teaching Assistant (1987-2004) for numerous courses in Engineering (FSA), EE and Physics (FS) programs

Visiting Scientist at CAIP

Rutgers University

Sep 1992 - Jun 1994 (1 year 10 months)

CAIP = Center for Computer Aid for Industrial Productivity on Busch Campus

Research on Wavelet and Sub-band Coding for Speech and Speaker recognition.

Government agency contracts (confidential) + Rutgers funding.

Lecturer / TA

International Space University

Jun 1993 - Sep 1993 (4 months)

Global Disaster Prevention and Recovery Remote Sensing SSP project

Contractor for parabolic flights experiments

European Space Agency - ESA

Jun 1989 - Sep 1989 (4 months)

Developed experiment monitoring and analysis SW solution (C/C++)

Development work driven out of l'Hôpital Erasme, ULB (Université Libre De Bruxelles - Brussels Free University, Belgium)

SSP'98

CERN (European Center for Nuclear Research)

Jun 1988 - Sep 1988 (4 months) *European*

Center for Nuclear Research

Worked on building/testing the CERN OPAL (Omni-Purpose Apparatus for LEP - (Large Electron Positron Collider)) detector - Precursor to LHC (Large Hadron collider).

Developed C/Fortran monitoring Software to monitor conditions in detector and detect events (particles)

Attended SSP'88 curriculum

Past (Board, advisory and representative roles):

Member Board of Advisors and Acting CTO

Vasu Networks Corp. (VNC)

Jan 2014 - Aug 2018 (4 years 8 months)

Main Highlights:

Acting CTO. Designed Strategy, Product Offering (Software and Hardware/chips) and Delivered Prototypes for Seamless Session Continuity

Strategy Beyond Seamless Session continuity in Telco and Internet

Patent and License Strategy and IP/Patents + Patent Portfolio management and refresh

Manage to Narrow ambition of management to achievable goal and pivot to license/patent business model considering team resources.

Since 2018 - Present: Advise on Patent and License strategy (and litigation plan)

Member of The Board of Advisors

Composure.ai

Sep 2017 - Feb 2018 (6 months)

Composure.ai is new name for Mosaixsoft (After exit from Stealth mode) - Advisory role since 2015.

Highlights: Acting CTO, Design/Review offerings. Strategy for new mission and offerings post Mosaixsoft. Help with BD and Funding.

Offerings: Composer and Portal: AI Optimizer for workloads (virtual/containers) and Kubernetes scheduler

Company and IP/Software acquired in February 2018. Since advise founder on re-acquired IP (open source vs. reuse in new startup).

Member TOSCA (OASIS)

OASIS

May 2012 - Sep 2017 (5 years 5 months)

Coordinator for across HP for Cloud

Influenced direction of YAML Profile specifications (Topology as code): TOSCA and NFV (Network Function Virtualization)

Co-Founder and CTO (Actarin)

Actarin

Jan 2016 - Aug 2017 (1 year 8 months)

Autonomic IT, Autonomic Computing via Big Data - Stealth - Emerging from experience with Lantana Cloud (eZest)

Exit: Acquired

Member of Board of Advisors

MosaixSoft, Inc.

Aug 2015 - Aug 2017 (2 years 1 month)

Later known as "composer.ai" Optimized Graphs of Workload stack for Hybrid Cloud and Data Centers

Acting CTO, review of offerings, technology and Strategy advisor

Helping on BD and engagement opportunities with customers

Member of the Advisory Board

Artitelly, Inc

Jul 2015 - Dec 2016 (1 year 6 months)

Complete DevOps SaaS tool chain

Technical, strategy and business advisory to Artitelly Solutions Inc and CloudTestSoftware.com

Status: Evolved into BidCRM. The portfolio still offered stand alone and may be revived

Member of Board of Advisors

CloudFuze

Jan 2014 - Dec 2016 (3 years)

Advised on targeting Enterprises and on targeting compliance (more than aggregation and document management)

Co-founder and CTO

Wr:st

Jan 2014 - Dec 2016 (3 years)

Designed hardware and some software and prototype. Hard to produce at scale as a startup and supply chain too hard to manage.

Representative

OCF - Open Cloud Forum

Jan 2015 - Jun 2016 (1 year 6 months)

HP representative

Board of Advisors and CTO

Lantana

Jan 2014 - Jan 2016 (2 years 1 month)

Autonomic Remediation via Big Data using:

Acting CTO: Defined the vision, designed offerings and prototype. Proposed strategy, MVP and roadmap

Became Actarin

Delegate / Coordinator

OMA SpecWorks

Jun 2002 - Feb 2012 (9 years 9 months)

Drove the use of IT/Internet technologies and approaches instead of Telco only approaches or standards.

Drove OSE blueprint and relationship to SOA, BPEL etc. for exposure. Standard for SDP, Origin of PaaS, API GWs, Mesh Networks, Micro Services

Many other WG specifications

Co-Founder and CTO (Kaqquru)

Kaqquru

Jan 2010 - Dec 2011 (2 years)

Full technical design and Prototype

Delegate / Coordinator

ATIS

Jan 2008 - Dec 2011 (4 years)

Delegate / Coordinator

TMF

Jan 2006 - Dec 2011 (6 years)

Evangelized and designed specifications and approaches for SDF (Service Delivery Framework) and SES (Software Enabled Services) evangelizing the use of SOA / IT practices (a la W3C, Oasis etc.) and its different dimensions with respect to OSS/BSS (and its own notions of services and lifecycle).

Board of Advisors

Skype

Jan 2011 - Jun 2011 (6 months)

Adviser on architecture and strategy to target Telecom market.

Tried to push Skype (and Microsoft) [Like did for Google a la Project Fi) to become a WiFi and Cellular without roaming OTT operator using Skype, Skype WiFi and Oracle's "Pragmatic approach to IMS" (OTT equivalent functions to IMS on IETF Internet) including OTT continuity.

Acquired by Microsoft

Representative / Coordinator

ETSI

Jan 2002 - Apr 2011 (9 years 4 months)

Delegate

3GPP

Jan 2000 - Apr 2011 (11 years 4 months)

Multimodal, DSR, IMS, DRM, service layer aspects for 3G, LTE and IP evolutions

Board of Advisors

Qik.com

Jan 2006 - Jan 2011 (5 years 1 month)

Board of advisors - Qik.com

Qik.com pioneered video streaming (video chat or like periscope) with revolutionary algorithms and a solution that open video chat as a key service available on emerging 4G networks (HSPA etc.). Co-Founder, CEO and Chairman: Ramu Sunkara; CEO: Vijay Tella; BoD included: Marc Andreessen.

Highlights: Reviewed architecture and technology. Convinced to do pivot to Telcos and designed / evangelized how to achieve then convinced operators. This resulted in revenue distribution deals for Qik from 13 operators world-wide (including all the four US Major operators Sprint, T-Mobile, ATT, and Verizon). Qik became the launch partner for 4G launches done by Sprint, T-Mobile, Verizon, Softbank, etc. Qik revenue streams have grown 10x from 2009 to 2010 and 2011.

Qik became the mobile-video platform for Skype/ Microsoft. Technology became available in Skype Mobile, Xbox

etc. Skype acquired Qik to deliver for Verizon shortly before Microsoft Acquired Skype.

Representative / Coordinators

JCP

Sep 2002 - Oct 2010 (8 years 2 months)

Many WGs including as Highlights: SIP, Portlets, J2EE, OSGI

Participant

W3C

Jan 1998 - Oct 2010 (12 years 10 months)

Many WGs including as Highlights: Voice Browser / VoiceXML, Device Independent, User agent profile, XHTML/XForms, Multimodal, WS/SOAP and WSI/OASIS coordination; WebRTC/WebSockets, XHTML Mobile profile and WAP Forum then OMA alignment.

Delegate / Coordinator (IETF)

IETF

Jan 2000 - Sep 2010 (10 years 9 months)

Many WGs. Highlights: Distributed Speech recognition: DSR RFCs (Codecs); MRCP (Media Resource Control protocols), SIP, SIMPLE and derivatives; Mobile email: LEMONADE RFCs (Lemonade Profile bis: ~ Next rev of IMAP-4 and SMTP - used by most smart phones today); HTTPBis, WebSockets, WebRTC, CloudEDA and Message brokers ...

Chair OASIS TMS

OASIS

Jan 2007 - Oct 2009 (2 years 10 months)

Telecom Member Section

Member of Board Of Directors

OMA SpecWorks

Mar 2005 - Oct 2009 (4 years 8 months)

Elected by OMA membership as IT vendor representative.

Delegate / Coordinator

OASIS

Jan 2003 - Oct 2009 (6 years 10 months)

Directions for

- BPEL, SAML, WS-X, SOA Architecture and Identity management
- Liberty/OMA alignment
- WSI/W3C WS alignment

Delegate and Member of Board of Director

OMA SpecWorks

May 2002 - Oct 2009 (7 years 6 months)

Representative and chair at many WG including: OMA ARCH, OMA REQ, Mobile Email, POC, Mobile Enterprise, IM, Presence, Messaging, DRM, Multi-modal, WAG, ... covering many enablers

Delegate (OSGi)

OSGi

Sep 2002 - Sep 2008 (6 years 1 month)

Delegate

Parlay

Jan 2003 - May 2008 (5 years 5 months)

Highlights: Push for alignment then affiliation with OMA; Push OMA for uptake with REST and alignment with GSMA ONE API; Push for use of standard WS approaches and technologies.

Delegate

WAP Forum

Jan 2000 - May 2002 (2 years 5 months) Pushed to standardize multimodal and for the creation of OMA

Founder and Dean of Curriculum

GEI - Global Environment Institute

Jul 1994 - Jan 1999 (4 years 7 months)

A global summer program focused on environment and modeled after ISU that offered several summer sessions for student from around the world (each year in a different location - starting with Berlin in 1996).

Education



Research Executive MBA Program

MBA, IBM Research MBA Program

2000 - 2001

IBM Research MBA program taught by Faculty from Columbia and NYU



Rutgers University

PhD, Physics / EE: CAIP - Visiting Scientist while at UCL

1992 - 1994

New Brunswick NJ



Université catholique de Louvain (Now, UL Louvain)

BS, MS, PhD, Electrical Engineering and Physics

1985 - 1994

MS in EE Thesis: Quantum Well Structure and its modeling for Electronics; Advisor: Prof. F. Van De Wiel (FAI, EE, FSA) (UCL and IEEE Europe winning Thesis)

BS in Physics Thesis: Physics of Quantum Well Structure, Advisor: Prof De Meester (Physics, FS and Material Engineering, FSA, UCL)

PhD. Thesis: "The wavelet transform in signal processing, with application to the extraction of the speech modulation model features" (Adjunct Thesis on "Quasi-Continuous Wavelet Transforms") (Cum Laude)

EE UCL Advisor: Prof. Paul Delogne (UCL, Tele)

Physics UCL Advisor: Prof. Jean Pierre Antoine (UCL, FYMA) ,Physics Rutgers Advisor: Prof. Ingrid Daubechies (Rutgers U. - Math and AT&T Bell Laboratories), EE Rutgers Advisors: Prof. Richard Mammone (Rutgers U. - CAIP) and Prof. Jim Flanagan (Rutgers U. VP, Head of CAIP and Former VP of AT&T Bell Laboratories)

Thesis Committee Chair: Prof. Alex Grossmann (Université de la Méditerranée Aix-Marseille II - France).



International Space University

MSS - Space Studies, Space Studies

1991 - 1991

ISU - International Space University

Academic Resume



<https://orcid.org/0000-0003-0195-2313> // Research Scientist ID and details –

ORCID

More papers, talks and patents tracked online.

Honors & Awards

Some: (more at ORCID)

 **MIT Journal top 20 most influential Software Patent - For "Conversational Biometrics"**

 **WTN - World Technology Network Fellow - WTN**

2004

2004 | WTN Fellow Laureate (Individual) for personal contributions to Software (IT Software) - for Biometrics work, Laureate for Corporate IT software contributions: - For driving standard mobile email (Oracle) (Laureat -1994)

 **IBM - 65 Inventor Plateau / Master Inventor - IBM**

2001

 **2001 | Divisional Patent Ward for Conversational Biometrics + Annual Royalties -**

IBM

2000

For recommendations and endorsement, please check LinkedIn: <https://linkedin.com/in/shmaes>.