Marco Orlandi : Curriculum Vitae

• Overview

Strong technical background and people orientation. At present (2004) has over 20 years experience in computer development, system design and analysis, including custom systems programming, commercial applications and new software technologies.

Excellent analytical and problem solving skills, as well as having a broad perspective and innovating, creative ability. Thorough in executing tasks; emphatic and patient in working with people.

• Education

Studies and the most important practical laboratory works are also presented here.

1997

Stanford University

Advanced JAVA Course, mastering JAVA programming. Instructor : Salil Deshpande (at the time Visigenic Corporation, actually, CEO, The Middleware Company)

1994

Rome University "La Sapienza"

Holds an Italian **BSE** in Electronics Engineering, at the University of Rome "La Sapienza", Faculty of Electronics Engineering, Department of Computer Science.

His thesis project was "Interfacing a 'SCARA' (selective compliant assembly robot arm) to a real time 'Hughes 680x0 VME BUS system' running the VxWorks real-time operating system''.

1990

Electronics laboratory experience : Designed and implemented an interrupt generator to provide external timing for a P.I.D. robot controller developed on a Macintosh II fx. Also developed the "C" and 680x0 assembly procedures needed to handle robot controlling through a Macintosh NU-BUS I/O interface. The robot was a six-degrees of freedom assembly arm produced by FIAT.

1989

Developed and tested a Macintosh C program to display and interactively modify the root locus of a polynomial transfer function. The user can interact with the diagram by placing with the mouse the zeroes and poles of the transfer function.

1988

Specializes in Industrial Robotics, Computer Interfacing and Control, Process Control.

1987

on a Sperry Univac Mainframe writes an EXEC-8 Pascal program for plotting Nyquist diagrams on vector terminal displays.

· Jobs, working experiences and other.

2001-2004

Actual working interests cover the following sectors : Enterprise Application Integration, Message Queueing, .NET Technologies, Java servlets, and application/devices integration on the internet. In 2003 EXO System Italia produces and distributes Marco's project for users authentication and access control on internet web sites, named SAINTlogin (more at www.saintlogin.com)

2000

Acts as a Senior Project Manager for EXO System Italia in an important EAI project at Parmalat SpA a worldwide Italian food and beverage firm. Parmalat signed important contracts (based on the e-INTEGRA product) with EXO System Italia srl, the recent enlarged company founded by Marco Orlandi to provide more efficient support for important customers. Marco also works as a senior consultant for major Pharmaceutical companies including Novartis, Pharmacia, Pfizer and other important manufacturing Italian companies.

1998

Back to Italy focuses his research interests in the area of Enterprise Application Integration, coordinates the development of a new software named e-INTEGRA (www.e-integra.it) and works for a huge customer in this important area : the Sweden/American pharmaceutical company "Pharmacia & Upjohn", which 6 years was acquired by the giant "Pfizer" later purchased the new release and extended the implementations of this integration framework for all of his industrial plants in Italy.

1997

Leaves to U.S., collecting important work experiences in California, also attended a JAVA course at the Stanford University.

1993-1996

While still attending studies at the Rome University works at EXO System, during this period the company gains many important contracts in the field of document management, including Ministry of Defence, Treasury, Health and Air force. Marco finally graduates in 1994.

1992

Starts working on Windows release of the GIADAscan document Management System

1991

Attended his military service lasted one year at the Italian Air Force at the Italian Ministry for Air Defence.

1987

While still at the University, founded EXO System s.a.s. a company focused to the distribution of some packages for the Macintosh wrote by himself and some collaborators, also begins writing the GIADA, document management System, that later will provide better success to the company.

Key Experience and skills

Marco Orlandi is keen on computers and electronics, his major interests concern bus-interfacing, universal DataBases and Object Oriented Programming technologies. He has made several key experiences in different programming environments. He began programming at the age of 15 with the "Applesoft Basic" (1979), and later developing many business programs for the Apple II, the Macintosh and PC-Windows environment.

Now he holds a strong technical knowledge on Unix, Windows Server and IBM iSeries platforms. This wide competence led to the development of the e-INTEGRA project at EXO System, which is an integration (middleware) framework actually available for all the three platforms.

Unix Experience

Informix - Unix - Risc 6000 – Internet and TCP/IP

The world of relational Databases opened a way for accessing remote hosts and M.O. experienced server side SQL DataBase programming running on Unix hosts such as the IBM RISC/6000. Part of the Risc/6000 experience comes from University laboratories, on this platform M.O. pioneered the development of C Language communication software on the intranet network (TCP/IP, Socket layer).

The Unix release of the e-INTEGRA framework was entirely designed by M.O. to be portable from the platforms UNIX and Windows, and it was developed entirely in C and C++ languages.

HP-Ux – IBM Ai/x- Sun Solaris –JAVA Application Servers (J2EE)

Many projects at EXO System Italia were conducted using JAVA technologies on different platforms, deep knowledge of Unix technologies up to kernel and daemon activities. Marco Orlandi is a Unix/Linux consultant and teacher, and has relevant experience in teaching having taught at many Unix Courses during his career.

Optical JukeBox Management

Knowledge of the following de-facto leading products in industry : Qstar, Plasmon, Maxoptix

Mainframe experience, AS/400

At the University of Rome, in 1983 he wrote many programs in PASCAL language, developing both on Apple's UCSD PASCAL and on the 'Sperry-Univac series 1100' mainframe with key experiences on its multi-user operating system, (the old EXEC-8), he also wrote numerous assembly language procedures accessing core functions of the EXEC-8 operating system.. Later, in 1985, having discovered the power of the Mac user interface, together with some friends he founded a company for developing and marketing Macintosh software. This company was one of the first Apple's Italian certified partners.

He hase in depth knowledge the iSeries (formerly AS/400) operating system, and leaded a team of pregrammers in developing the OS/400 release of the e-INTEGRA product delivered by EXO System in 2001

Macintosh Experience :

C Language.

In 1984 when Apple starts selling the Macintosh (with its innovative user interface), M.O. almost immediately starts investigating its capabilities.

In 1985 he approaches the 'C' language with which he begins to write state-of-the art programs based on the new 'event driven' user interface of the Macintosh.

C Macintosh Development and Hardware Interface Design.

The first program developed was the 'MacTel', a good selling desk-accessory for the Macintosh including a hardware interface, marketed by 'Micro Progettazione Avanzata' (M.P.A.), and later marketed by EXO System Italia, co-founded by M.O. in 1987.

Language Interpreter and Macintosh API skill

While attending the University he writes a simple expression parser and language interpreter that was used to develop the 'Formuler' a Macintosh program that could make it possible to graphically draw any complex mathematical formula (to paste in any Word processing document) by entering its plain text expression (something very similar has been added two years later into Microsoft's Word new releases).

Formuler was placed to the market by M.P.A., and later by EXO.

Postscript

Another interesting Macintosh Product he developed later was 'ScriptEdit'. This program automatically generates PostScript language procedures that print special text effects (Circular text, Rotated text, Shadowed text etc.). A few months later an U.S. product was marketed with almost the same features of the 'ScriptEdit' (it was called 'Laser/FX'), and actually MS-Word also has such a feature (Microsoft Word-Art).

Text Retrieval and B*TREE engine.

His interest in text-retrieval databases leads him in the development of a document storage and retrieval program, capable of storing documents generated with any Macintosh Application. In 1987 the first release of GIADA for the Macintosh was ready for the market. M.O. left M.P.A. and established the new company named <u>EXO System</u>, its core business was (and actually is) centered around Document Storage and Retrieval, and later expanded to cover the *imaging* growing business.

GIADA's DB engine is based on a revised B*TREE indexing technology.

Windows Experience :

In 1989 it was clear that EXO had to get over the limits offered by the small Macintosh market. Microsoft's Windows (with its early version 2.1) appeared to be a good PC platform to develop for. In 1990 Windows 3.0 came out and M.O. could complete a good porting of GIADA from the Macintosh to the PC/Windows environment.

The new revisions were enhanced in parallel for both environments (Macintosh and Windows). Latest knowledge in Windows covers .NET and Windows NT/2000 Services.

Messaging, queue management

IBM MQSeries and MS Messaging platform are widely studied and applied in actual developments. Asynchronous communication between devices and applications is at the base of the e-INTEGRA product.

CD-ROM publishing

An important work that M.O. developed in 1990 for EXO System is the "ITALEDI CD ROM" containing all the Italian Courts judgements texts organized in a relational DB centered around the GIADA DB engine (actual edition contains almost 500.000 sentences ranging from 1982 to 1996). This CD was commissioned by an important italian publish house (see ITALEDI) and it is available in both Macintosh and Windows versions. This CD is published and updated yearly.

Imaging -XIONICS/KOFAX

In 1992 imaging capabilities have been added to GIADA for Windows, and the name of the product was changed to 'GIADAscan' to emphasize this feature. With the advent of fast imaging scanners, it was important to provide fast compression through dedicated hardware. XIONICS and KOFAX have been chosen to provide these capabilities and M.O. gained experience in the complex field of image scanning in parallel with compression and manipulation.

OCR technologies

An OCR engine was added to the GIADAscan imaging software. In 1991 the "Recognita" OCR engine was selected among those available as add-on toolkits. Using the Recognita APIs M.O.implemented a user interface with which the user can select a part of the desired text on the GIADAscan image viewer and drag it to the destination field of the GIADAscan Database, text is automatically recognized and pasted.

Query language interpreter

The past experience in developing a syntax parser and language interpreter (see Formuler) was used by M.O. to implement a query language as part of the GIADAscan product, this language (Jade Query Language) provides a simple way to write macros that can be used select one or more sets of records within a GIADA DataBase.

AS/400 - C.O.L.D. techniques Print Spooling

DDE and NetDDE

JQL (Jade Query Language) was later enhanced to support DDE (Dynamic Data Exchange) and NetDDE, M.O. designed the protocols needed to provide the communications between GIADAscan and other programs supporting DDE such as Microsoft Excel or Microsoft Word. These features were important to give the user an easy way to store documents directly to a GIADAscan DataBase at the touch of a button.

ODBC - Borland IDAPI and Microsoft's JET engine.

ODBC is the key technology that opens GIADAscan to the world of other manufacturer's DataBases. M.O. designed and implemented these features using Borland's IDAPI (Independent Database API).

OOP experience and Internet technologies experience

Knowledge in this areas : STL / MFC / .NET Web Services SOAP/XML HTTP server (Apache, IIS, TomCat) CGI and dynamic HTML TCP/IP : Sockets, Windows Sockets JAVA / JAVA Servlets .NET Framework

Unix platforms Experience

RISC/6000 - AIX SCO Unix SQL - Informix

Windows NT/2000/XP

Knowledge of all the NT Server network architecture, including Active Directory Management

Hardware Design experience

Address decoders I/O ports 6502 and Z/80 Interfacing 68000 IRQs generation and management VME Bus Interfacing Serial I/O interfacing (SAINTlogin, MacTel+hardware protection)

• Other Experiences :

While attending the University, M.O. developed controlling software for the S.C.A.R.A., a kind of robot used mainly in electronics manufacturing.

This experience includes knowledge of the 680x0 processor timings, IRQ management and VME BUS interfacing.

A visual programming tool 'LabView' was also used to develop the PC/WIndows interface to the robot controller, the controller actually runs on a Hughes 680x0 VME bus real-time system. The LabView software is linked to the VME-BUS system using an internet TCP/IP connection on openened sockets.

In August 1997 M.O. attended an intensive JAVA course at the *STANFORD UNIVERSITY*, taught by Salil Deshpande, from Visigenic corp. The course was centered around the new JAVA 1.1 AWT.

Products developed or designed

A list of the successful products placed to the market is presented here, some of them have been developed independently, others have been designed by M.O. and developed by the EXO system's staff of developers for which he actually is the team leader.

'MacTel' (1985): a software and hardware package with which the user can automatically compose telephone numbers, by selecting with the mouse a name from the address book, automatic redialing functions are provided. All done through the serial port of the Macintosh.

'Syllabae' (1986): a software for automatically hyphenate italian documents on the Macintosh, at the time hyphenation was not included in available word processors, for almost one year this product accompanied all word processors sales in Italy, its strength was the possibility of hyphenating documents just after writing, using a clipboard cut/paste automatic sequence.

'Formuler' (1987): a tool for pasting easily mathematical/scientific formulas inside a word processing document. The use simply writes the plain text of the expression (using a simple syntax made of about 30 commands) and Formuler evaluate it and places a picture of the graphical expression in the clipboard.

ScriptEdit (1988) Tool for writing complex and text effects using Postscript printers.

'GIADA' (1989) Document Management System, includes a B*TREE database

'ITALEDI CD ROM' (1990) Italian huge archive for Administrative Laws and judgements, published for te first time in 1990 by Edizioni Italedi, now covers 20 years of knowledge in this field, actual release contains more than 800.000 records and it still uses the GIADA database engine (in newer releases) in its retail distribution CD.

'GIADAscan' (1991) Optical Acquisition and Document Management System, includes access to SQL databse

GIADAscan HyperNote (1994) Hypertext annotation on scanned documents.

GIADAscan Reviews (1995) Automatic cut-and-paste for reviews. Scanned articles can be easily composed by using an innovative article placing algorithm developed by Marco Orlandi.

e-INTEGRA (1998) Enterprise Application Integration suite, that contains a message broker, for delivering message data in XML format between business applications in a company. Marco is a pioneer in the integration fields that later, in 2001 becomes standardized with SOAP/XML protocols.

SAINTlogin (2003) CellPhone Users validation, innovative system that acts as a web service providing user validation to grant users access to a web site content. At few days from release it's been to rated by many important web services evaluation websites. (google, yahoo or altavista : search for 'saintlogin') www.saintlogin.com

Present Activity : actual position

Marco Orlandi is actually a project leader at <u>EXO System Italia (www.exosystem.it)</u>, a company co-founded in 1987 with his brother Andrea.

Marco actually covers the position of Senior Engineer leading a staff of programmers.

He is actually focusing his experience on "middleware" for enterprise application integration and server side application development uising .NET related technologies

He remebers with joy his profitable experiences in U.S.A., in the Silicon Valley area, during which he also attended a STANFORD JAVA course in Palo Alto, California in 1997.

\cdot Personal

born in Rome, July 1st 1964 actually resides in Rome Address : Via Tornielli, 41- 00151 Roma Italy Status : Single E-Mail : marco.orlandi@exosystem.it Position : Senior engineer at <u>EXO System Italia</u> (info@exosystem.it)

• Interests

Among his hobbies M.O. is an R/C airplane modeler, which takes a big part of his scarce free time. He enjoys swimming and footing.

Preferred Readings

Technical readings include Dr. Dobbs Journal, Microsoft Systems Journal, Microsoft's Developer Network News and more...

He relaxes with his favourite novel authors, among them are Ken Follett, Grisham, F. Forsyth, Tom Clancy, Wilbur Smith, Ludlum and others.