

# CURRICULUM VITAE

**Ing. Marco A. Calamari**

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## Skills

- Design and integration of collaboration and document management applications using Open Source and Free software
- Internet/Intranet security and privacy systems: firewall, tunneling, authentication & cryptography. PGP, anonymous remailer, pseudonym server and steganography. E-commerce system design & administration. Security manager of University labs.
- Design & project management of Distance Learning projects for Poste Italiane, A.I.P.A., Enel.it
- Design & administration of LAN & Internet/Intranet network.
- Design, organization & teaching of Information & Communication Technology courses. Recent achievement: security & cryptography course for AIPA (Italian state Authority for Information Technology) with 1000+ participants
- Lotus Notes/Domino system administration & application development. Certifications: CLP Principal application developer & Principal system administrator R5, Certified Lotus Instructor
- SAP R/3 System administration; ABAP4, Data dictionary
- Mechanical & electronic CAD/CAM use & system administration
- French and English languages, spoken and written, good level
- Computer programming languages
  - Visual Basic, HTML, VRML, PostScript; commercial application development.
  - Lotus Notes/Domino
  - SAP R/3 ABAP
  - Fortran; huge application development (over 20.000 lines).
  - Java, Perl (web development); APL e Pascal (elements).
- Computers used / administered:
  - Intel with Windows 95/98/NT4/2K/XP, Linux, and Unix SRV4
  - Apple Macintosh with Mac OS 9 and Mac OS X
  - Sun Microsystems Sparc/UltraSparc with Solaris 1.1.1/2.6.

- Control Data 6600 with NOS OS.
- IBM 3031, 4341 e 370/168 with OS/VS1, MVS and VM/CMS.
- Digital VAX-11/MicroVAX with VMS 5.0 and Berkeley UNIX.

## Jobs

**10/1991 to 9/2005 worked** at Elea S.p.A. - Training and Consultancy. Responsible of thematic area for Network, CAD and Multimedia of the Florence location, and of designing of formation courses financed by the European Community for the Tuscany region and computer security course for A.I.P.A. (Italian state Authority for ICT)

**1988:** worked in the United States in the field of Computer Aided Design mechanics (stereolithography) and auto routing of printed circuits in technology SMT at the Olivetti Advanced Technology Center of Cupertino.

**1/1986 - 9/1991:** Assumed at the Olivetti Division R&S Personal Computer as CAE-Cad Manager, with offices of management hardware and software of the systems, training and user assistance; the CAE/CAD has a staff of 4.

**6/1981 - 12/1985:** Assumed at the office Technical Calculation of the Nuovo Pignone in Florence, in the sector of the scientific programming and Finite Element calculation, with offices of development of new applications, Scientific programs management and user assistance.

**1981:** achieved the qualification of Engineer in the Register of the Engineers of Pisa, number 844.

**9/1980 - 6/1981:** assumed at the Quality Assurance office of the NIRA nuclear architect in Genoa, in the department of Quality Assurance of scientific programs.

**1975 – 1980:** Graduated "*summa cum laudae*" in Nuclear Engineering at the *Universita' degli Studi di Pisa*, discussing the thesis "*Study and design of component for sodium-cooled fast nuclear reactors, with particular reference to: liners, fittings, anti sodium leakage system and penetrations*"; the thesis was realized in collaboration with the NIRA, at the nuclear power plant PEC at Brasimone.

## Publications, courses and exhibitions

**2005** published "*Today is the tomorrow we should have worried about yesterday: a proposal for an Italian law regulating usage, retention and deletion of georeferenced and chronoreferenced automatically collected data containing unique user identifiers*" at BILETA 2005 - British and Irish School of Law, Belfast. The law proposal is currently under examination by Italian Senate representatives.

**2002-2005 Founder and organizer of e-privacy**, the first Italian conference on privacy in the information age.

**2002-2004** Speaker in several scientific conferences and meetings; Webb.it, Hackmeeting, Linuxday..

**1999** SAP R/3 ABAP & system administration courses c/o SAP Italia

**1998** Lotus Notes/Domino courses in application development & system administration c/o Lotus Italia

**1997** Cisco router configuration and administration with IOS 10 c/o Horizon, Milan.

**1993 - 95** exhibition of Multimedia, Broadcasting and Virtual Reality Imagina '93 & '95, Monaco.

**10/1991** exhibition of Multimedia ECHTE '91 in Wien.

**9/1986** Architecture VAX/VMS, System Management VAX/VMS, Performance Management VAX/VMS, at the Digital Training Center - Milan.

**9/1985** Seminar: " Measures of temperature in the gas turbines" at Department of Energetic, Ancona

Engineering Faculty.

**11/1984** Seminar "The application of the criterion of the fracture mechanics to the mechanical design", held at Nuovo Pignone, Florence.

**5/1983** "Structural Dynamics" at the Ispra Research Center of the European Community.

**1980** Post-degree master in Nuclear Engineering at the University of the Studies in Pisa; discussion paper. "A method for the application of cyclical symmetry conditions to FEM calculations using standard applications"; vote of 64/70

**1977** VM/CMS, FORTRAN 77, APL held at the University National Center of Electronic Calculation - Pisa.

## LAN, WAN & Internet skills

- **Designed and administrated Internet resources in 1986** at the Olivetti R&S Center in Pisa. Realized a connection with the corporate Olivetti Internet connection (Host O.A.T.C. olivea was one of the backbone hosts of Usenet) using a Cisco 3000 bridge and a dedicated leased serial line. All the Internet services were available to the users of local Ethernet LAN via PC and serial terminal concentrators. A NNTP local news server was available to users. Administered Valid UNIX BSD 4.3 workstation and DEC VAX/VMS 5.0 hosts
- **Realized the Ethernet LAN in 1991** at the Florence Elea site. Realize and administer an UUCP connection to Olivetti corporate network for e-mail and news. Administered Sun Solaris 1.1 workstation. In 1994 shutdowns the UUCP connection and connect the LAN (Novell, AppleTalk, EtherTalk, TCP/IP protocols) to Tuscany WAN and Internet via SMDS 2 Mb connection and Cisco 2514 router. Administered UNIX SVR4 system.
- **Install, in 1994 for didactic use, a complete local Intranet**, using Sun Microsystems workstation with OS Solaris 1.1.1 & 2.3, with FTP, Telnet PC server, DNS, NFS, HTTPD and remote access. Administered Sun Solaris 1.1 & 2 workstations. Participate the startup of the Elea corporate Intranet in 1995 with a second router and CDN leased line. The Elea Intranet has local POP3, DNS, HTTP, NFS & firewall.
- **In 1995 realized the WEB** for the Vocational Formation Service of the Tuscany region and for private association San Giovanni di Dio.
- **In 1995 participate in the realization of an experimental, local-multicast, IP multipoint videoconferencing system PC-based**. The videoconferencing system was used for courses of the Tuscany Region.
- **In 1995 experimented with CuSeeMe and MBONE videoconferencing**.
- **From 1995 worked on Intranet security** and perform penetration test of the corporate Intranet.
- **From 1995 acquire theoretical knowledge about digital cash** and related prototype of economic transaction.
- **From 1995 participate to the Cypherpunks mailing list** and to **VRML VAG & mailing list**
- **In 1995 realized the Elea FP Home World** using pre-VRML 1. In 1996 realized an architectural modeling of the **Florentine Brunelleschi's Dome** using VRML 1.1. The work includes writing the related HTML 3.0 pages for an Elea FP client. The WEB was put on Internet in June and demonstrated during the European Summit held in Florence in July.
- **In 1999 founded the Winston Smith Project**, association that promote Internet privacy and Open Source privacy applications.
- **From 2000 is a member of three Open Source software development projects**: Freenet,

Mixminion, Mixmaster. Wrote a small contribution the the IETF RFC defining the Mixmaster protocol.

## Notable achievements

- **Stress analysis during launch for the GOME satellite** for the Officine Galileo of Campi Bisenzio, launched with success in the '94 using the ARIANE European launcher.
- **Design, start-up and management of the computer room of Olivetti R&S Personal Computer Center** in Pisa; it include 2 systems UNIX S320, 2 systems UNIX Sun/Cadnetix, a VAX-11/750 and a MicroVAX II connected by Ethernet network with protocol TCP/IP; the local net is connected to Internet by mean of a gateway. The computer runs packages of mechanical and electronic CAE/CAD: Euclid/Matra-Datavision, CAD-PCB/Cadnetix, and CAE/ Valid. The access to the computers can be obtained from graphical terminals or from a network of personal computer.
- **Writing of ImageLab**, program of acquisition, analysis, storage and retrieval of medical images for the Officine Galileo of Campi Bisenzio. The program is written in Visual Basic, with critical routines in Borland Turbo C++. The systems, that control a frame grabbing and video overlay board Screen Machine, include manuals, installation program for MS-Windows 3.11, protection hardware and service routines for the hardware lock programming.
- **Integration of a proprietary CAD/PCB electronic system with existing workflow of design and production;** the activity achieved the integration of CAD applications with a pre-existing production structure working with CAM. In particular resolved interfacing problems with peripheral like tape perforators, plotters and fotoplotters, as well as problems of instruction generation for numerical-controlled assembly lines.
- **Realization of master for printed circuits boards without the use of fotoplotter.** A method was developed for the realization of master using phototypesetters, starting from standard Gerber files. This achieved a reduction of 80% of the cost of the films and 90% the time of elaboration
- **Development of a program for the automatic calculation of the offer for steam turbines;** starting from a small dataset that describe the turbine in a consistent an unambiguous manner, it is possible to cut the time necessary to prepare an offer by a factor of ten. The program is able to notice the request of a non-standard offer.
- **Development of a F.E.M program for stress calculation in nets of buried pipelines,** considering the non-linear effects of the soil; the program has been used for the design of the Soviet Urengoy/Uzgorod gas pipeline.
- **Structural calculations of gravity bending for the camera of an astronomic telescope** for the Officine Galileo of Campi Bisenzio.
- **Articles for computer science magazines** (Computer science Today & UNIX, Bit, SuperApple, Mouse), as columnist and editor; for example the first course of PostScript in Italian language.
- **F.E.M. static dynamic & thermoelastic transient analysis of mechanical components for nuclear, space, oil & offshore industries,** using ASME III & Det Norske Veritas codes, SAP IV/V, ANSYS, NASTRAN F.E.M. programs, and Euclid, AutoCAD e I\_deas-Supertab CAD programs.
- **Static and dynamic stress analysis of centrifugal compressor rotors.** Using the codes SAP V 2 I\_deas-Supertab, the stress was calculated in the shovel-disk zone, with the method of the local moves imposed to the frontier. The activity defined new methods of design for rotors.