Michele Porelli

Curriculum Vitae

Experience

Vocational

2014–Present Linux System Administrator, Embedded Developer, CONSOFT S.P.A., Via Pio VII, 127, 10137 Torino, Italy.

Improved medical smartwatch functionality, built a layer between Asterisk and a custom CRM, tested new partners software and set up testing machines, following agile processes.

Main activities and responsibilities:

- optimizing and documenting microcontroller code
- $\circ~$ developed an abstraction layer between Asterisk and a custom CRM
- $\circ\,$ written custom dialplans for Asterisk
- setting up testing servers and testing new partners software

Keywords:

- Software:
 - Linux, bash, Debian, Asterisk, Ruby on Rails, virtual machines, KVM, OpenSSH, iptables, Nimsoft Monitor, ownCloud, Apache, nginx, PHP, PostgreSQL, Samba, xrdp, C, X11, Doxygen, GIT
- Hardware:
 - HP servers, Atmel ATMega
- Other:
 - embedded, microcontrollers, computer networks, telephony networks

2010–2014 DevOps, DOMOSETTE S.R.L., Strada antica di Collegno, 157, 10146 Torino, Italy.

Built an innovative servers infrastructure using virtualization, designed internal network, developed various Linux powered embedded systems with GPRS and UMTS tecnology, following agile processes.

Main activities and responsibilities:

- developed embedded and low power consumption solutions for remote management via cellular network based on Linux
- co-projected an electronic board (schematic)
- developed a software for automatic reading of the heat cost allocators via m-bus protocol
- built a backup system with high redundancy and history using ZFS technology
- built VPN networks
- installed heat cost allocators on radiators
- designed and wired office network
- technical assistance and computers maintenance (Linux and Windows workstations)
- built touch-screen totems
- designed office phone network combining VoIP and fixed lines
- built a Linux KVM (with Debian and Windows server) server running isolated virtual machine with web server, databases, Amazon S3 clone using riak-cs, centralized user management, dns server, web remote application, mail, calendar, tasks and contacts service, GIT development server

Keywords:

- Software:
 - Linux, OpenWRT, bash, Debian, Windows Server, FreePBX, virtual machines, KVM, OpenSSH, OpenVPN, iptables, Apache, nginx, PHP, Ruby, MySQL, PostgreSQL, riak, riak-cs, Amazon S3, OpenLDAP, Kerberos, Samba, OmniAuth, Bind9, isc-dhcp-server, wine, Java, C, X11, open-xchange, dovecot, Postfix, GIT, gitlab, meter-bus, iSCSI, ZFS, Ruby on Rails
- Hardware:
 - Mikrotik products, HP managed switches, Siemens KNX and mbus products, Texas Instruments MSP430
- Other:
 - embedded, microcontrollers, cellular network, heat cost allocator, computer networks, telephony networks

2013–Present System Administrator, SHOWBYTE S.R.L., Piazza Maria Teresa, 7, 10123 Torino, Italy. Migrating datacenter from Linux to Solaris, managing Solaris, Linux and Windows servers, IT area responsable.

Main activities and responsibilities:

- migrating datacenter from Linux and Windows servers to StormOS
- built new network infrastucture based on KVM and Solaris zones technologies
- re-designed office network, technical assistance and computers maintenance (Macintosh and Windows workstations)
- built VPN network
- server management (StormOS, Windows 2003, CentOS and Debian servers)
- $\circ~$ built a backup system with high redundancy and history using ZFS technology
- $\circ\,$ built a system to manage the multimedia archive and made it accessible for the customers
- $\circ~$ designed office phone network combining VoIP and fixed lines
- $\circ~{\rm designed}$ websites

Keywords:

- Software:
 - Solaris, StormOS, Macintosh, Linux, CentOS, Windows Server, Active directory, ZFS, kvm, iptables, OpenSSH, OpenVPN, Apache, PHP, Ruby, MySQL, Samba, qmail, Symantec Backup Exec, Joomla!, Gallery (web application), Trixbox, Adobe products
- Hardware:
- HP servers, Netgear managed switches, Cisco routers, Zyxel firewalls, FXO/FXS cards
 Other:
 - websites, computer networks, telephony networks

2013–Present Network architect, ARIC STUDIO MEDICO DIAGNOSTICO, Via Giambattista Pergolesi, 13, 10154 Torino, Italy.

Medical images processing, cabling new office network and built a remote assistance system.

Main activities and responsibilities:

- x-ray CT medical images processing
- built a central DICOM images storage system
- designed a system to print DICOM imageas on paper
- designed and wired network system
- building customizable advertising screen
- built VPN networks
- technical assistance and computers maintenance (Windows workstations)
- remote assistance
- designed company website

Keywords:

- Software:
- Linux, Debian, Windows, OpenVPN, PHP, MySQL, Samba, Joomla!, UltraVNC, EZ3D-2009 Hardware:
 - Raspberry Pi, HP managed switches
- Other:
 - embedded, website, computer networks, telephony networks

Miscellaneous

2010 **Technical assistant**, KUNSHAN CHINITA FOOD CO. LTD, 118 Renmin Road, Kunshan, China. Re-designed electrical, network and phone systems and computer manteniance.

Main activities and responsibilities:

- Maintenance of computer-controlled ice-cream machine
- computer manteniance
- design of electrical, network and phone systems

Keywords:

- Software:
 - Windows, RealVNC
- Other:
 - electrical network, computer networks, telephony networks

Via Casimiro Sperino 23/A – 10126 Turin, Italy mobile +39 349 0629825 • phone +39 011 19826751 email michele at porelli.eu • web michele.porelli.eu current as of September, 2014 2007 **Technical assistant**, COMPUTER QUALITY S.R.L., Via Italia, 75, 10036 Settimo Torinese (Torino), Italy .

Technical assistance indoor and outdoor.

Main activities and responsibilities:

• Technical assistance (hardware and software)

Websites

- 2014 **Ruby on Rails**, GIAPPICHELLI EDITORE, www.rivistadellaregolazionedeimercati.it. Built magazine website, newsletter management.
- 2013 **Joomla!**, ARIC STUDIO MEDICO DIAGNOSTICO, www.aricmedica.it. Built the company website, mobile template, booking system.
- 2010 **Joomla!**, "TORINO 19" BOY SCOUT ASSOCIATION, www.torino19.org. Built the association website, managing contents, photos and videos gallery, mobile template.
- 2010 **DokuWiki**, PERSONAL, michele.porelli.eu, porelli.eu. Built a website about all the projects and software I carried out, IPv6 compatibility.
- 2009 **Joomla!**, INSIEME PER SAN MAURO, www.insiemepersanmauro.it. Built a website for a local civic list.

School projects

2010–2013 **IT Area supervisor**, ISAAC PROJECT, POLITECNICO DI TORINO, Corso Duca degli Abruzzi 24, 10129 Torino, Italy.

Making a robot able to play football and renewed laboratory infrastructure.

Main activities and responsibilities:

- Robot:
 - Carrying out a Linux real-time system for the robot
 - Designed part of the OpenCV based software for the visual identification and motors control
 - Developed the robot control system
- Computers' laboratory:
 - Built a firewall with Squid proxy and iptables
 - Built a Linux server with the following services: VPN, documentation wiki, distributed revision control and source code management, FTP access, printer server, PXE network boot server with a custom Linux distribution containing our custom SDK, webcam surveillance.

Keywords:

- Software:
 - Linux preempt, Debian, OpenCV, C, bash, iptables, Squid, OpenVPN, DokuWiki, GIT, proftpd, CUPS, tftp-hpa, isc-dhcp-server, mjpg-streamer
- Hardware:
 - Raspberry Pi, BeagleBoard, Texas Instruments MSP430
- Other:
 - embedded, microcontrollers, computer networks
- 2008 **Research**, ITI GIUSEPPE PEANO, Corso Venezia 29, 10147 Torino, Italy. Built an home-made organic photovoltaic cell

Education

- 2011 CCNA, Cisco Certified Network Associate, All exams passed with merit.
- Present Bachelor of Computer Engineer, Polytechnic of Turin, Torino, Italy.
- 2003–2008 **5 years High School Degree**, ITI GIUSEPPE PEANO, Corso Venezia 29, 10147 Torino, Italy. Science and Technology High School
 - 2008 PET, Preliminary English Test, Pass.
 - 2008 ECDL, European Computer Driving License, All exams passed with merit.

Workshops

2013 Techniques for embedded design, Milan, Italy.

Freescale seminary about embedded design for internet of things, automotive, industrial and networking

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- 2013 **CITCON**, *Turin*, *Italy*. Continuous Integration and Testing Conference
- 2013 **Comfort technology**, *Politecnico di Milano, Milan, Italy*. Project and install the integration for the efficiency
- 2011 **Campus Party 2011**, Granda, Spain. Open source and robotics technology
- 2011 Space, Politecnico di Torino, Turin, Italy.
 3rd International Workshop on Verification and Testing of Space Systems

Social skills

2006–2007 Voluntary service at "Michele Rua's Disabled Centre" in Corso Cadore 20/8, Turin, Italy 1999–Present Voluntary service at AGESCI an Italian Boy Scout association

2007–2010 Turin Linux Day organizing committee member: presentation, trainings, assistance for the software installation

Technical skills

Computer science Operating systems Linux, Windows, MacOS, *BSD, Solaris Embedded Debian, OpenWRT, Android, OpenEmbedded, iOS and Windows Mobile platforms Virtualization KVM, XEN, VirtualBox, QEMU, Parallels and VMware products Networking IPv4 and IPv6 protocols, DNS servers, VPN software, WEB servers, proxy and caching servers, PXE boot, SSH, FTP, DHCP, Samba NFS, AFP, iSCSI Backup rsync, Symantec Backup Exec, btrfs and ZFS Databases PostgreSQL, riak and MySQL Clustering Mosix, OpenSSI Users managment OpenLDAP, Kerberos, Active directory VoIP Asterisk and FreeSWITCH SIP servers C, C++, Visual Basic, Ruby, Java, Bash scripting, Javascript, HTML, PHP, CSS Programming languages Web platforms Joomla!, DokuWiki, Drupal Management Agile (kanban and scrum methods) Miscellanea LibreOffice, Microsoft Office, Gimp, Photoshop, LATEX Electronics

Microcontrollers Atmel ATmega (Arduino), Texas Instruments MSP430 and Stellaris CAD Eagle, Altium, KiCad, AutoCAD

Languages

	Writing	Reading	Speaking	Listening
English	B1*	B2*	B1*	B1*
Italian	mothertongue			
*using QCER notation				

Interests

- Boy scouting	- Homemade stuffs
- Cooking	- Climbing
- Finance	- Photography

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