

### Experience

#### Vocational

2014–Present **Linux System Administrator, Embedded Developer**, CONSORT 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
- developed an abstraction layer between Asterisk and a custom CRM
- 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 technology, 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

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*current as of September, 2014*

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 responsible.

Main activities and responsibilities:

- migrating datacenter from Linux and Windows servers to StormOS
- built new network infrastructure 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)
- built a backup system with high redundancy and history using ZFS technology
- built a system to manage the multimedia archive and made it accessible for the customers
- designed office phone network combining VoIP and fixed lines
- 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, Zykel 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 images 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 maintenance.

Main activities and responsibilities:

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

Keywords:

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

- 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.rivistadellaregolazioneideimercati.it](http://www.rivistadellaregolazioneideimercati.it).  
Built magazine website, newsletter management.
- 2013 **Joomla!**, ARIC STUDIO MEDICO DIAGNOSTICO, [www.aricmedica.it](http://www.aricmedica.it).  
Built the company website, mobile template, booking system.
- 2010 **Joomla!**, "TORINO 19" BOY SCOUT ASSOCIATION, [www.torino19.org](http://www.torino19.org).  
Built the association website, managing contents, photos and videos gallery, mobile template.
- 2010 **DokuWiki**, PERSONAL, [michele.porelli.eu](http://michele.porelli.eu), [porelli.eu](http://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](http://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

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2008 **Research**, ITI GIUSEPPE PEANO, Corso Venezia 29, 10147 Torino, Italy.  
Built an home-made organic photovoltaic cell

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## 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.*

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## Workshops

2013 **Techniques for embedded design**, *Milan, Italy.*  
Freescale seminary about embedded design for internet of things, automotive, industrial and networking  
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

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## 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

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## Technical skills

### Computer science

Operating systems	Linux, Windows, MacOS, *BSD, Solaris
Embedded platforms	Debian, OpenWRT, Android, OpenEmbedded, iOS and Windows Mobile
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
Programming languages	C, C++, Visual Basic, Ruby, Java, Bash scripting, Javascript, HTML, PHP, CSS
Web platforms	Joomla!, DokuWiki, Drupal
Management	Agile (kanban and scrum methods)
Miscellanea	LibreOffice, Microsoft Office, Gimp, Photoshop, L <sup>A</sup> T <sub>E</sub> X

## Electronics

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

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## Languages

	Writing	Reading	Speaking	Listening
English	B1*	B2*	B1*	B1*
Italian	mothertongue			

*\*using QCER notation*

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## Interests

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

*I authorise the use of my personal data in compliance with Legislative Decree 196/03.*

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