

# Michele Porelli

## Curriculum Vitae

### Experience

#### Vocational

2014–Present **Consultant**, CONSOFIT S.P.A., Via Pio VII, 127, 10137 Torino, Italy.  
DevOps consultant, specialized in opensource and embedded devices.

- **DevOps, Testing Engineer** - SKYLOGIC S.P.A. - A EUTELSAT COMPANY (YEAR 2014-2015)  
Continuous integration for satellite ISP product validation. Testing and implementation of new features.

Main activities and responsibilities:

- Built real-time log storage with historical search, reporting and statistical analysis
- Engineered tests and a platform to automate continuous integration validation
- Built a dashboard to monitor real browsing experience of customers
- Implemented laboratory to simulate production environment

- **Embedded Developer, DevOps** - CARETEK S.R.L. (YEAR 2014)  
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

Keywords:

- Software:
  - Linux, bash, Debian, CentOS, Asterisk, virtual machines, KVM, VMware ESXi, User Mode Linux, OpenSSH, iptables, Splunk, Nimsoft Monitor, ownCloud, Apache, nginx, Ruby on Rails, PHP, syslog-ng, logstash, kibana, elasticsearch, MySQL, PostgreSQL, Samba, xrdp, guacamole, C, X11, Doxygen, GIT, Gitlab
- Hardware:
  - Juniper, Cisco, Mikrotik, ViaSat solutions, HP managed switches, HP servers, Atmel ATmega
- Other:
  - embedded, microcontrollers, computer networks, telephony networks

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current as of April, 2015

2010–Present **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 allocator via m-bus protocol
- built a backup system with high redundancy and history using ZFS technology
- built VPN networks
- installed heat cost allocator 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, guacamole, Java, C, X11, open-xchange, dovecot, Postfix, GIT, gitlab, meter-bus, iSCSI, ZFS, Ruby on Rails
- Hardware:
  - Mikrotik, HP managed switches, Siemens KNX and mbus products, Texas Instruments MSP430
- Other:
  - embedded, microcontrollers, cellular network, heat cost allocator, computer networks, telephony networks

2013–2014 **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, Zyxel firewalls, FXO/FXS cards
- Other:
  - websites, computer networks, telephony networks

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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.

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## 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

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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

2015 **Integrated Cybersecurity & Risk Management**, *Milan, Italy.*

Cyber risk, management and international laws

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

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

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## Technical skills

### Computer science

Operating systems	Linux, Windows, MacOS, *BSD, Solaris
Embedded OS	Debian, OpenWRT, Android, OpenEmbedded, iOS and Windows Mobile
Virtualization	KVM, XEN, VirtualBox, QEMU, UML, 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
Data management	rsync, Symantec Backup Exec, btrfs and ZFS
Databases	PostgreSQL, riak, elasticsearch and MySQL
Analysys	Splunk, logstash, kibana
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
Microcontrollers	Atmel ATmega (Arduino), Texas Instruments MSP430 and Stellaris
CAD	Eagle, Altium, KiCad, AutoCAD

### Electronics

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## Languages

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

*\*using QCER notation*

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## Interests

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

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

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