

Michele Porelli

Curriculum Vitae

Experience

Vocational

2015–Present
full-time **DevOps, Integration**, DIGITARIA INTERNATIONAL S.A., 9, Avenue des Hauts-Fourneaux,
L-4362 Esch-sur-Alzette - Luxembourg.
Responsible of U project systems integration and developer. Satellite infrastructure and datacenter maintainer.

Main activities and responsibilities:

- ESA U Project integration designer - e-learning via satellite connections
- Distribution of RTP/RTMP/HTTP multicast and unicast streamings using synchronizing technologies
- Palo Alto, Cisco and Juniper firewall, switches and routers deployment and configuration
- Maintaining VoIP platform for company customers
- Datacenter maintenance and automation using Ansible and Chef
- Built a solution for assets management and monitoring using Racktables and munin

Keywords:

- Software:
 - Linux, bash, Debian, Windows Server, virtual machines, KVM, Proxmox, VMware, OpenSSH, OpenVPN, iptables, Ansible, debops, Chef, Apache, nginx, PHP, Ruby, MySQL, PostgreSQL, Kurento, WebRTC, Wowza, FFmpeg, vlc, srs, OpenLDAP, Kerberos, Samba, Bind9, isc-dhcp-server, guacamole, Java, C, X11, dovecot, Postfix, GIT, gitlab, meter-bus, iSCSI, ZFS, Ruby on Rails, Racktables, Nagios, munin, Basecamp, multicast
- Hardware:
 - Cisco, Juniper, Palo Alto, Dell servers, Android tablets, interactive boards
- Other:
 - Astra satellite network, iDirect technologies, computer networks, telephony networks

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current as of May, 2016

2014–2015 **Consultant**, CONSORT S.P.A., Via Pio VII, 127, 10137 Torino, Italy.
full-time 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:
 - Eutelsat satellite network, embedded, microcontrollers, computer networks, telephony networks

2010–Present **DevOps**, DOMOSETTE S.R.L., Strada antica di Collegno, 157, 10146 Torino, Italy.
< '14 *full-time* Built an innovative servers infrastructure using virtualization, designed internal network, developed
> '14 *freelance* 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.
freelance 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, Zyxxel 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.
freelance 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.
freelance 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.
internship Technical assistance indoor and outdoor.

Main activities and responsibilities:

- Technical assistance (hardware and software)

Websites

2014 **Ruby on Rails**, GIAPPICHELLI EDITORE, www.rivistadellaregolazioneideimercati.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.

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

2016 **FOSDEM.org 2016**, Brussels, Belgium.

Free and Open Source Software Developers' European Meeting

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

Social skills

- 2006–2007 Voluntary service at "Michele Rua's Disabled Centre" in Corso Cadore 20/8, Turin, Italy
- 1999–2015 Voluntary service at AGESCI an Italian Boy Scout association
- 2007–2010 Turin Linux Day organizing committee member: presentation, trainings, assistance for software installation

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)
- 3D modelling and CAD Blender, BRL-CAD, AutoCAD
- Miscellanea LibreOffice, Microsoft Office, Gimp, Photoshop, L^AT_EX

Electronics

- Microcontrollers Atmel ATmega (Arduino), Texas Instruments MSP430 and Stellaris
- EDA Eagle, Altium, KiCad

Languages

	Writing	Reading	Speaking	Listening
English	B2*	B2*	B2*	B2*
French	A1*	A2*	A1*	A1*
Italian	mother-tongue			

**using QCER notation*

Interests

- Scout

- Homemade stuffs / DIY

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 current as of May, 2016

- Cooking
- Finance
- Traveling

- Climbing
- Photography
- Cultures and languages

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

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