Michele Porelli

Curriculum Vitae

Experience

Vocational

2015–Present
full-time

DevOps, System Integration, Digitaria International S.A. - Imagination Factory s.à.r.l, 9, Avenue des Hauts-Fourneaux, L-4362 Esch-sur-Alzette - Luxembourg.
Responsible of U project systems integration and developer. Satellite infrastructure and data center maintainer.

Main activities and responsibilities:
- ESA U Project integration designer - e-learning via satellite connections
- Distribution of RTP/RTMP/HTTP multicast and unicast streaming using synchronizing technologies
- Palo Alto, Cisco and Juniper firewall, switches and routers deployment and configuration
- Maintaining VoIP platform for company's 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

2014–2015
full-time

Consultant, Consoft s.p.a., Via Pio VII, 127, 10137 Torino, Italy.
DevOps consultant, specialized in open-source and embedded devices.

- **DevOps, Testing Engineer** - Skylogic s.p.a. - a Eutelsat company (year 2014-2015)
  Continuous integration for satellite ISP devices 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 smart watch 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 integrated micro-controller 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, integrated micro-controllers, computer networks, telephony networks

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2010–Present *< '14 full-time* *> '14 freelance*	**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, integrated micro-controllers, cellular network, heat cost allocator, computer networks, telephony networks

2013–2016 *freelance*	**Network architect**, ARIC STUDIO MEDICO DIAGNOSTICO, Via G. 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
- built user configurable 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

2013–2014 *freelance*	**System Administrator**, Showbyte s.r.l., Piazza Maria Teresa, 7, 10123 Torino, Italy. Migrating data center from Linux to Solaris, managing Solaris, Linux and Windows servers, IT area responsible.

Main activities and responsibilities:
- migrating data center 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

Miscellaneous

2010 *freelance*	**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 *internship*	**Technical assistant**, Computer Quality s.r.l., Via Italia, 75, 10036 Settimo Torinese, Italy. Technical assistance indoor and outdoor.

Main activities and responsibilities:
- Technical assistance (hardware and software)

Websites

2016	**Ruby on Rails**, GGrande A.S.D.P.C.S, www.ggrande.it. Soccer tournament website, including: enrollments, fee payments, matches calendar, ranking, etc.
2014	**Ruby on Rails**, Giappichelli Editore, www.rivistadellaregolazionedeimercati.it. Magazine website, newsletter management.
2013	**Joomla!**, ARIC studio medico diagnostico, www.aricmedica.it. Company website, mobile template, booking system.
2010	**Joomla!**, "Torino 19" Boy Scout Association, www.torino19.org. Association website, managing contents, photos and videos gallery, mobile template.
2010	**DokuWiki**, Personal, michele.porelli.eu, porelli.eu. 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, web-cam 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, integrated micro-controllers, computer networks
2008	**Chemical research**, ITI GIUSEPPE PEANO, Corso Venezia 29, 10147 Torino, Italy. Built an home-made organic photo voltaic cell

Education

2011	**CCNA**, *Cisco Certified Network Associate*, *all exams passed with merit.*
Partial	**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	**Verification and Testing of Space Systems**, *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 committee member: presentation, training, network

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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, LXC, Docker, 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
Analyze	Splunk, logstash, kibana
Automation	Ansible, Chef, Puppet
Clustering	Mosix, OpenSSI
Users management	OpenLDAP, Kerberos, Active directory
VoIP	Asterisk and FreeSWITCH SIP servers
Dev. languages	C, C++, Visual Basic, Ruby, Java, Bash scripting, Javascript, HTML, PHP, CSS
Web platforms	Joomla!, DokuWiki, Drupal
Management	Agile (kanban and scrum methods)
2D/3D CADs	Blender, BRL-CAD, AutoCAD
Miscellaneous	LibreOffice, Microsoft Office, Gimp, Photoshop, LaTeX

Electronics

Micro controllers	Atmel ATmega (Arduino), Texas Instruments MSP430 and Stellaris
EDA	Eagle, Altium, KiCad

Languages

	Writing	Reading	Speaking	Listening	Scale
English	C1 / 7.0	C1+ / 7.5	C1 / 7.0	C1 / 7.0	QCER / IELTS
French	A1 / A1	A2 / A2	A1 / A1	A1 / A1	QCER / DELF
Italian			mother-tongue		

Interests

- Scout
- Cooking
- Finance
- Traveling

- Homemade stuff / DYI
- Climbing
- Photography
- Cultures and languages

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