Experience

Vocational

04/2017 — Present
full-time

Senior Systems and Software Development Engineer, AMAZON WEB SERVICES INC., 2 Park St, Sydney NSW 2000, Australia — 18 York Street, Toronto, ON, M5J 2T8, Canada
Amazon Aurora and RDS developer and operations engineer. Currently managing a MySQL/MariaDB team in Toronto

- **Senior Software Development Engineer** - AWS RDS OPEN SOURCE (CANADA: YEARS 2022-PRESENT)
  Manager for MariaDB and MySQL Toronto team. Technical team lead for Aurora, MariaDB, MySQL and PostgreSQL Open Source DevOps development

  Main activities and responsibilities:
  - Design and implement PoC for a brand new service tailored for RDS XXL customers owning 1M+ databases
  - Technical lead for the automatic deployment of new AWS regions for all the RDS services and components
  - Manager for the local MariaDB and MySQL engine team, including remote employees
  - Senior leader to improve RDS internal developers experience
  - Ensure database release quality, optimise testing and deployment agility
  - Review designs of internal and customer facing products
  - Security guardian for Aurora and RDS related components and services
  - Ensure quality and integrity of interview processes for any role across the company
  - Hiring events facilitator
  - Local group community leader

- **Senior Systems Development Engineer** - AWS RDS OPEN SOURCE (AUSTRALIA: YEARS 2020-2022)
  Technical team lead for Aurora, MariaDB and MySQL Open Source DevOps development. Ad-interim manager for MariaDB and MySQL Sydney team

  Main activities and responsibilities:
  - Created a tool to automate database benchmarks and facilitate validations
  - Ensure database release quality, optimise testing and deployment agility
  - Projects and technical lead
  - Review designs of internal and customer facing products
  - Security guardian for Aurora and RDS related components and services
  - Ensure quality and integrity of interview processes for any role across the company
  - Local group community leader
  - Ad interim team manager

- **Systems Development Engineer** - AWS AURORA AND RDS OPEN SOURCE (AUSTRALIA: YEARS 2017-2020)
  Technical team lead for Aurora, MariaDB and MySQL Open Source DevOps development

  Main activities and responsibilities:
  - Project and technical lead
  - Designed and developed a tool able to identify and mitigate customer issues automatically via custom rules
  - Built a machine learning to classify automatically customer issues
  - Managing and improving infrastructure and tooling for all RDS and Aurora products
  - Created and contributed to numerous internal tools and services

Keywords:
- Software:
  - Linux, bash, Debian, Red Hat, Windows, virtual machines, Kubernetes, EKS, ECS, EC2, KVM, XEN, VMware, OpenSSH, OpenVPN, IPSEC, iptables, pcp, Apache, nginx, Ruby, MariaDB, MySQL, PostgreSQL, DynamoDB, OpenLDAP, Kerberos, 2FA, Java, GIT, Ruby on Rails, AWS, Aurora, RDS, machine learning, SageMaker, SQS, SNS, Lambda, S3
- Other:
  - AWS internal and customer facing services

507-15 Lower Jarvis Street – Toronto, Ontario, M5E 0C4 – Canada
mobile *+1 (437) 776-0958* • **email** *michele@porelli.eu* • **web** *michele.porelli.eu*
linkedin *micheleporelli* • **github** *porelli*
authorized to work in *Australia, Canada, EU, New Zealand, Norway, Switzerland*
current as of January, 2024   *1/7*

09/2015 — 03/2017 *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 for 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, iSCSI, ZFS, Ruby on Rails, Racktables, Nagios, munin, Basecamp, multicast
- Hardware:
  - Cisco, Juniper, Palo Alto, Mikrotik, Dell servers, Android tablets, interactive boards
- Other:
  - Astra satellite network, iDirect technologies, computer networks, telephony networks

05/2014 — 08/2015 *full-time*	**Consultant**, Consoft s.p.a., Via Pio VII, 127, 10137 Torino, Italy DevOps consultant, specialized in satellite and ground networks, open-source and embedded devices.

- **DevOps, Testing Engineer** - Skylogic s.p.a. - an Eutelsat company (years 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 searching, 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 the whole 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

507-15 Lower Jarvis Street – Toronto, Ontario, M5E 0C4 – Canada
mobile *+1 (437) 776-0958* • **email** *michele@porelli.eu* • **web** *michele.porelli.eu*
linkedin *micheleporelli* • **github** *porelli*
authorized to work in *Australia, Canada, EU, New Zealand, Norway, Switzerland*
current as of January, 2024 2/7

10/2010 — 06/2019 *< '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 cellular 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 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
- designed, cabled and configured local network, including remote access via secure VPN
- 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

04/2013 — 05/2016 *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
- 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

507-15 Lower Jarvis Street – Toronto, Ontario, M5E 0C4 – Canada
mobile *+1 (437) 776-0958* ● **email** *michele@porelli.eu* ● **web** *michele.porelli.eu*
linkedin *micheleporelli* ● **github** *porelli*
authorized to work in *Australia, Canada, EU, New Zealand, Norway, Switzerland*
current as of January, 2024 3/7

| 04/2013 — 03/2014 | **System Administrator**, SHOWBYTE S.R.L., Piazza Maria Teresa, 7, 10123 Torino, Italy |
| *freelance* | 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)
- designed, cabled and configured local network, including remote access via secure VPN
- 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

| 08/2010 | **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

School projects

| 07/2010 — 08/2013 | **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 a home-made organic photo voltaic cell

507-15 Lower Jarvis Street – Toronto, Ontario, M5E 0C4 – Canada
mobile *+1 (437) 776-0958* ● **email** *michele@porelli.eu* ● **web** *michele.porelli.eu*
linkedin *micheleporelli* ● **github** *porelli*
authorized to work in *Australia, Canada, EU, New Zealand, Norway, Switzerland*
current as of January, 2024   *4/7*

Education

2023	**IELTS General Training**, *International English Language Testing System*, *Average: 7.5*
2019	**IELTS Academic**, *International English Language Testing System*, *Average: 7.5*
2011	**CCNA**, *Cisco Certified Network Associate*, *all exams passed with merit*
Partial	**Bachelor of Computer Engineer**, *Polytechnic of Turin*, Torino, Italy
2003–2008	**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

2017	**FOSDEM.org**, *Brussels, Belgium* Free and Open Source Software Developers' European Meeting
2016	**FOSDEM.org**, *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**, *Milan, Italy* Project and install the integration for the efficiency
2011	**Campus Party 2011**, *Granada, 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

2021–Present	Security warden, first aid emergency and CPR trained
2021–Present	Community lead in Amazon
2017–2019	Voluntary service at "Lentils as anything" in Sydney
2017–2019	Voluntary member for preparation of TEDxSydney, main and youth events
1999–2015	Voluntary service at Torino19 AGESCI - an Italian Boy Scouts association
2006–2007	Voluntary service at "Michele Rua's Disabled Centre" in Corso Cadore 20/8, Turin, Italy
2007–2010	Turin Linux Day committee member: presentation, training, network

Technical skills

Computer science

Operating systems	Linux, Windows, MacOS, *BSD, Solaris
Embedded OS	Debian, OpenWRT, Android, OpenEmbedded, iOS and Windows Mobile
Virtualization	KVM, Firecracker, XEN, VirtualBox, QEMU, UML, Parallels and VMware products
Containerization	LXC, Docker, Kubernetes
Networking	IPv4 and IPv6 protocols, DNS servers, Firewalls, 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, MariaDB, MySQL, DynamoDB and Amazon Aurora
BI	Splunk, logstash, kibana, redash, QuickSight
Automation	Ansible, Chef, Puppet
Clustering	Mosix, OpenSSI
Users management	OpenLDAP, Kerberos, Active directory, Authelia, Keycloak
VoIP	Asterisk and FreeSWITCH SIP servers

507-15 Lower Jarvis Street – Toronto, Ontario, M5E 0C4 – Canada
mobile *+1 (437) 776-0958* ● **email** *michele@porelli.eu* ● **web** *michele.porelli.eu*
linkedin *micheleporelli* ● **github** *porelli*
authorized to work in *Australia, Canada, EU, New Zealand, Norway, Switzerland*
current as of January, 2024   5/7

Dev. languages	C, C++, Visual Basic, Ruby, Python, Java, Bash, Javascript, Typescript, react, HTML, PHP, CSS
Web platforms	Joomla!, DokuWiki, Drupal
Management	Agile (kanban and scrum methodologies), Jira, Asana
2D/3D CADs	Blender, BRL-CAD, AutoCAD
Miscellaneous	LibreOffice, Microsoft Office, Gimp, Photoshop, LaTeX

Electronics

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

Languages

	Writing	Reading	Speaking	Listening	Scale
English	C1+ / 7.5	C2 / 8.0	C1+ / 7.5	C2 / 8.0	QCER / IELTS
Spanish	A1 / A1	A2 / A2	A1 / A1	A2 / A2	QCER / DELE
French	A1 / A1	A2 / A2	A1 / A1	A1 / A1	QCER / DELF
Italian	mother-tongue / native				

Interests

- Scout
- Cooking
- Finance
- Traveling
- Crafting / DIY
- Climbing
- Photography
- Cultures and languages

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