Nicolas Morey

Senior Linux Developper

74190 Passy
+33 6 95 20 31 74
nicolas@morey-chaisemartin.com
nicolas.morey-chaisemartin.com
29/06/1986

Work Experience

March 2017 upto now
Senior Linux Developer, *SUSE*, Home Office.
- Centralize, package and support **Infiniband and Omni-Path** userspace tools and HPC libraries
- Develop and support RDMA **Kernel** modules
- Develop testsuites for Software/Hardware validation.
- Customer feature developments and support
- Environment: RPM, OBS, Infiniband, Omni-Path, Networking, MPI, **Kernel**.

April 2015 upto March 2017
Network solutions manager, *Kalray*, Montbonnot.
- Conception of a 80Gb/s smartNIC product
- Port and optimization of **OpenDataPlane** on MPPA.
- Management of a team of 5 engineers
- **High-speed PCI and Ethernet** interfaces support
- In charge of all Linux drivers: **PCI, netdev, AF ALG, crypto, RoCE, DPDK**
- Environment: MPPA, C, ODP, Ethernet, PCI, **Linux Drivers**.

July 2013 upto April 2015
Video solutions manager, *Kalray*, Montbonnot.
- Design and development of a flexible **HEVC** core encoder optimized for MPPA
- Technical leader and management of a small development team
- Port, parallelization and optimization of MainConcept 4K **HEVC** encoder on MPPA
- Environment: MPPA, C, C++, Ruby, Parallel programming, HEVC.

July 2009 upto July 2013
Embedded software architect and developer, *Kalray*, Montbonnot.
- Development of an embedded operating system and runtime libraries.
- Development of a front-end **compiler** for a highly parallel streaming language.
- Development of **scheduling, placing and routing** tools for streaming applications
- In charge of **continuous integration** using Git/Hudson.
- IT Co-administrator.
- **Agile/Scrum** Project Management.
- Environment: **Embedded systems**, MPPA, C, Assembly, Ruby, Parallel programming.

Octobre 2008 upto July 2009
Embedded System Engineer, *Coframi*, Meylan.
- Consulting for Bull in the R&D HPC Team: **Infiniband** expert.
- Development of fault-tolerant **routing algorithms** (patents).
- Development of network monitoring solutions for large clusters.
- Environment: Infiniband, Routage, QoS, **Linux drivers, HPC**.

May 2008 upto Septembre 2008
MSc Project, *Northumbria University*, Newcastle, UK.
- Design and development of a **hard real-time micro-Kernel** for the Cell Broadband Engine.
- Environment: **Multicore, Real-Time, Scheduling**, Synchronization, C, Assembly.

June 2007 upto August 2007
IT Intern, *Allibert-Trekking*, Montmélian.
- User and server support on a Mac OS X infrastructure.
- Deployment of **monitoring tools**.
- Development of synchronization tools between inventory, administration and monitoring tools.
- Environment: Mac OS X, Php, Perl, Python, Bash, MySQL, openDirectory.

January 2007
Junior-Entreprise Consultant, *MVA Limited*, Grenoble.
- Development of a GPS coordinate extraction tools using Google Maps.
- Environment: **Java**, Swing.

Octobre 2006
Junior-Entreprise Consultant, *Institut Laue-Langevin*, Grenoble.
- Porting of an objective-C crystallography demonstration application to Java.
- Environment: Java, Swing, HTML.

Education

2008   **Computing Science Engineer**, *ENSIMAG*, Grenoble.

2008   **MSc in Embedded systems**, *Northumbria University*, Newcastle, UK.
- In parallel of the third year at ENSIMAG..

Personal Experience

2008 **Contributions to Open Source projects**.
upto Today
- Contribution to mailing list and development of **Linux, Git**, OpenSM, ODP.
- **Maintainer** for rdma-core stable releases
- Occasional involvement in various projects: Sick-Beard, RBTools, libdbi...

2011 **Damage (DAtabase MetA GEnerator)**.
upto Today
- Development of a script toolset for custom database generation.
- Generates a complete access and modification API for C, Java, Ruby to XML/YAML/Binary databases from a simple YAML description.
- Environnement: Ruby, GPL.

2006 **Participation to IBM Cell B.E. Contest**.
- Development of a generic Open Source *producer/consumer* framework for Cell clusters.
- Environment: C++, sockets.

2005 **IT Administrator of N'Sigma, ENSIMAG Junior-Entreprise**.
upto 2007
- Administration of a mixed Linux/Windows network.
- Participation to cost assessments of N'Sigma contracts.

Skills

Computer

Languages	**C, Ruby**, Java, Assembly, Ada, Php, C++, MPI	Graphical Environment	**X11, Gtk, Tk, Swing, Qt**
Tools	Emacs, Netbeans, Eclipse, gcc, **gdb**	Video	**H.265**, x265
Operating Systems	**Kernel, Parallel programming, Drivers**, Signals, RPM packaging	Version control	**Git, Gitolite, Jenkins**, OBS, CVS, SVN, SCCS
System Administration	**Linux**, FreeBSD, Samba, Postfix, Apache, Shell scripting, Bash, Sed, Awk	Networking	Routage, TCP/IP, Ethernet, **Sockets, QoS, Infiniband, Omni-Path**, ODP
Databases	**SQL, Oracle, MySQL, LDAP, Design**, Optimisation	Mathematic Tools	Matlab, CoinOR, GPLK

Languages

French	Native speaker	
English	Bilingual	*TOEFL Score:100/120*

Patents

WO2011001362 Methods and devices for evaluating interconnection efficiency of parallel computer networks based upon static routing schemes

WO2011151569 Method of pseudo-dynamic routing in a cluster comprising static communication links and computer program implementing this method

WO2011144848 Method of optimizing routing in a cluster comprising static communication links and computer program implementing this method

Others

Hobbies	Mountains, photography, traveling, guitar.
Sport	Mountaineering, rock climbing, hiking, ski and ski touring.