

<p>Bureau D307 Département d'Informatique 9, rue Charles Fourier F-91011 Evry Cedex, France.</p> <p>Born on 1976/10/20, Paris French Citizen, 2 children</p> <p>Tel: +33 6 10 39 31 17 Mail: gael.thomas@telecom-sudparis.eu Web: http://www-public.it-sudparis.eu/thomas_g/</p>	<p>Gaël THOMAS</p> <p>Professor Telecom SudParis</p>
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My main research interests include **operating systems** and **managed runtime environments**. I am particularly interested in improving the *performance* and the *safety* of these systems. My work is mainly experimental, with each idea being experimented or simulated, and then exhaustively evaluated with real applications.

I. EDUCATION AND EXPERIENCE

2014 – today	Professor at Telecom SudParis
2006 – 2014	Associate Professor (HDR) at UPMC Sorbonne Université. Regal Team – INRIA/LIP6 Tenured of the scientific award of UPMC after 2010
2005 – 2006	PostDoc at Université Joseph Fourier (Grenoble/France). Adele Team – LSR (today LIG)
2001 – 2005	Ph.D. Thesis – Université Pierre et Marie Curie (UPMC). SRC Team – LIP6

II. HIGHLIGHTS

- **2018–2021: Primate (ANR PCRI). Principal Investigator for the french side.**
- 2013–2015: Richelieu (FUI project). Scientific leader for UPMC.
- **2012-2015: Infra-JVM (ANR Infra project). Principal Investigator.**
- Supervision of 10 PhD students, 7 having defended.
- PC Member of **Eurosys 2018**, **Eurosys 2016**, VEE 2015, PLOS 2013 and DAIS 2012.
- Leader and contributor of the VMKit project (LLVM Licence). VMKit is a toolkit to help developers and researchers to experiment with new ideas in managed runtime environments. Was integrated in the Linux Ubuntu distribution. Web site: <http://vmkit.llvm.org>. Around 50000 lines of code. Started in 2007, retired in 2014.
- **Coordinator of the computer science courses at Telecom SudParis (~600 students, ~40 courses).**
- Treasurer of the French chapter of the ACM SIGOPS (ASF) from 2014 to 2016, after having been the chair between 2011 and 2014.
- Founding member of the organizing committee of the "colloquium d'informatique de l'UPMC Paris Sorbonne" (2011 – 2014)
- Since 2001, I have taught around 2600 hours in the domains of systems, languages and software engineering. I have conceived 9 different courses.

III. MOST SIGNIFICANT PUBLICATIONS

- [1] Gauthier Voron, Gaël Thomas, Vivien Quéma, and Pierre Sens. An interface to implement NUMA policies in the xen hypervisor. In *Proceedings of the EuroSys European Conference on Computer Systems, EuroSys'17*, page 14, Belgrade, Serbia, 2017. ACM. Rank A.
- [2] Jean-Pierre Lozi, Florian David, Gaël Thomas, Julia Lawall, and Gilles Muller. Fast and portable locking for multicore architectures. *ACM Transactions on Computer Systems (TOCS)*, 33(4):13:1–13:62, January 2016. Rank A*.
- [3] Koutheir Attouchi, Gaël Thomas, Gilles Muller, Julia Lawall, and André Bottaro. Incinerator - eliminating stale references in dynamic OSGi applications. In *Proceedings of the international conference on Dependable Systems and Networks, DSN'15*, page 11, Rio de Janeiro, Brazil, 2015. IEEE Computer Society. Rank A.

- [4] Lokesh Gidra, Gaël Thomas, Julien Sopena, Marc Shapiro, and Nhan Nguyen. NumaGiC: a garbage collector for big data on big NUMA machines. In *Proceedings of the conference on Architectural Support for Programming Languages and Operating Systems, ASPLOS'15*, page 14, Istanbul, Turkey, 2015. ACM. Rank A*.
- [5] Florian David, Gaël Thomas, Julia Lawall, and Gilles Muller. Continuously measuring critical section pressure with the Free-Lunch profiler. In *Proceedings of the conference on Object Oriented Programming Systems Languages and Applications, OOPSLA'14*, page 14, Portland, Oregon, US, 2014. ACM. Rank A*.
- [6] Nicolas Palix, Gaël Thomas, Suman Saha, Christophe Calvès, Gilles Muller, and Julia Lawall. Faults in linux 2.6. *ACM Transactions on Computer Systems (TOCS)*, 32(2):4:1–4:40, 2014. Rank A*.
- [7] Lokesh Gidra, Gaël Thomas, Julien Sopena, and Marc Shapiro. A study of the scalability of stop-the-world garbage collectors on multicores. In *Proceedings of the conference on Architectural Support for Programming Languages and Operating Systems, ASPLOS'13*, pages 229–240, Houston, Texas, USA, 2013. ACM. Rank A*.
- [8] Suman Saha, Jean-Pierre Lozi, Gaël Thomas, Julia Lawall, and Gilles Muller. Hector: Detecting resource-release omission faults in error-handling code for systems software. In *Proceedings of the international conference on Dependable Systems and Networks, DSN'13*, page 12, Budapest, Hungary, 2013. IEEE Computer Society. **Best paper award**, Rank A.
- [9] Jean-Pierre Lozi, Florian David, Gaël Thomas, Julia Lawall, and Gilles Muller. Remote core locking: migrating critical-section execution to improve the performance of multithreaded applications. In *Proceedings of the Usenix Annual Technical Conference, USENIX ATC'12*, pages 65–76, Boston, MA, USA, 2012. USENIX Association. Rank A.
- [10] Nicolas Palix, Gaël Thomas, Suman Saha, Christophe Calvès, Julia Lawall, and Gilles Muller. Faults in linux: ten years later. In *Proceedings of the conference on Architectural Support for Programming Languages and Operating Systems, ASPLOS'11*, pages 305–318, Newport Beach, CA, USA, 2011. ACM. Rank A*.
- [11] Sergey Legtchenko, Sébastien Monnet, and Gaël Thomas. Blue banana: resilience to avatar mobility in distributed MMOGs. In *Proceedings of the international conference on Dependable Systems and Networks, DSN'10*, pages 171–180, Chicago, IL, USA, 2010. IEEE Computer Society. Rank A.
- [12] Nicolas Geoffray, Gaël Thomas, Julia Lawall, Gilles Muller, and Bertil Folliot. VMKit: a substrate for managed runtime environments. In *Proceedings of the international conference on Virtual Execution Environments, VEE'10*, pages 51–62, Pittsburgh, PA, USA, 2010. ACM. Rank A.
- [13] Nicolas Geoffray, Gaël Thomas, Gilles Muller, Pierre Parrend, Stéphane Frénot, and Bertil Folliot. I-JVM: a java virtual machine for component isolation in OSGi. In *Proceedings of the international conference on Dependable Systems and Networks, DSN'09*, pages 544–553, Estoril, Portugal, 2009. IEEE Computer Society. Rank A.