Gauthier VORON
Postdoctoral Research Associate

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My research interests revolve around performance and design of distributed or concurrent systems. More specifically, my research focuses on *High performance distributed consensus*, *Low overhead system virtualization* and *Memory topology and NUMA architectures*. My aim is to address lacks of efficiency in complete systems by scrutinizing them at every level of abstraction from algorithms to hardware.

Formation

2018-2021	**Postdoc**	High Performance BFT Consensus for Blockchains University of Sydney
2014-2018	**Ph.D.**	Efficient Virtualization of NUMA Architectures LIP6, Sorbonne Univeristé & Télécom SudParis
2012-2014	**Master**	Operating Systems and Distributed Software Sorbonne Université

Research

PUBLICATIONS

2019 — **Using differential execution analysis to identify thread interference**
Mohamed Said Mosli Bouksiaa, François Trahay, Alexis Lescouet, Gauthier Voron, Rémi Dulong
Amina Guermouche, Élisabeth Brunet, Gaël Thomas
In *IEEE Transactions on Parallel and Distributed Systems*
abs/1912.10367 (2019)

2018 — **Efficient Virtualization of NUMA Architectures**
Gauthier Voron
PhD Thesis advised by by Gaël Thomas and Pierre Sens

2017 — **An interface to implement NUMA policies in the Xen hypervisor**
Gauthier Voron, Gaël Thomas, Vivien Quéma, Pierre Sens
In *Proceedings of the EuroSys European Conference on Computer Systems, EuroSys'17*
page 14, Belgrade, Serbia, 2017

2015 — **Optimisation mémoire dans une architecture NUMA : comparaison des gains entre natif et virtualisé**
Gauthier Voron, Gaël Thomas, Pierre Sens, Vivien Quéma
In *Proceedings of the Conférence en Parallélise, Architecture et Système, COMPAS'15*
page 10, Lille, France, 2015, **Best paper award**

PREPRINTS

2020 — **Dispel: Byzantine SMR with Distributed Pipelining**
Gauthier Voron, Vincent Gramoli
Under review for *IEEE/IFIP International Conference on Dependable Systems and Networks 2021*

REVIEWING
2019   Member of the ICDCS 2019 program commitee
2016   Member of the Eurosys 2016 shadow program commitee

Teaching

2017-2019   Multicore Kernels and Virtualization
2015-2017   Introduction to Operating Systems
2016   C programming and data structures
2015   Introduction to Relational Databases

Reference List

Vincent Gramoli	Postdoc supervisor	`vincent.gramoli@sydney.edu.au`
Gaël Thomas	PhD advisor	`gael.thomas@telecom-sudparis.eu`
Julien Sopena	Unit coordinator	`julien.sopena@lip6.fr`