

# Curricular Summary

Claude TADONKI

Birthdate: 13/06/1971

Senior researcher in Computer Science

MINES ParisTech – PSL / Centre de Recherche en Informatique (CRI)

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## 1) Education/Training

1998 – 2001: PhD in *Computer Sciences*: University of Rennes I (France)

2012 – 2013: HDR in *High Performance Computing*: University Paris-Sud (France)

## 2) Professional History

- 2001 to 2003: Researcher  
Operation Research and High-Performance Computing  
*University of Geneva (Switzerland)*
- 2003 to 2004: Researcher  
OR and Theoretical Computer Science  
*University of Geneva (Switzerland)*
- 2004 to 2005: Researcher  
Combinatorial and High-Performance Computing  
*University of Geneva (Switzerland)*
- 2006 to 2007: Research Fellow  
Mathematical modelling and Scientific computing  
*EMBL Grenoble (France)*
- 2007 to 2009: Research Fellow  
Parallel computing and codes optimization  
*University of Paris-Sud (France)*
- 2009 to 2012: Research Fellow  
High Performance Computing for LQCD  
*LAL / IN2P3 / CNRS (France)*
- 2011 to now: Researcher and lecturer  
High Performance Computing and Code Transformations  
*Mines ParisTech – PSL University (France)*

## 3) List of 5 representative publications

- Susungi and **C. Tadonki**, *Intermediate Representations for Explicitly Parallel Programs*, ACM Computing Surveys, Volume 54, Issue, May 2021.
- O. Haggui, **C. Tadonki**, L. Lacassagne, F. Sayadi, B. Ouni, *Harris Corner Detection on a NUMA Manycore*, Future Generation Computer Systems, 2018.
- Y. Samadi, M. Zbakh, **C. Tadonki**, *Performance comparison between Hadoop and Spark frameworks using Hibench benchmarks*, Concurrency and Computation (CCPE), 2017.
- **C. Tadonki**, *High Performance Computing as a combination of machines and methods and programming*, HDR University Paris-Sud Orsay, 2013.
- C. Beltran, **C. Tadonki** and J.-Ph. Vial, *Solving the  $p$ -median problem with a semi-Lagrangian relaxation*, Computational Optimization and Applications, Volume 35(2), October 2006.

## 4) Selected collaborative projects

SUTRA-NCCR (EU: 2001-2003); ACCPM (FNS : 2001 - 2003) ; CRESCCO (EU : 2002 – 2005) ; BIOXHIT (EU : 2006 – 2007) ; OCELLE (ANR : 2007 – 2009) ; TER@OPS (FUI : 2007 – 2009) ; PetaQCD (ANR : 2009 – 2012) ; BASTION ( EU : 2014 – 2016) ; BioCloud (STIC-AMSUd : 2012 – 2014) ; TIMC (CARNOT-MINES : 2013) ; COMSYS (CARNOT-MINES : 2016) ; PACA (CARNOT-MINES : 2017) ; ACOPAL (PSL : 2016 – 2018).

## 5) Academic Quantitative Indicators

- **Publication in international conferences:** 60
- **Publications in journals with selective editorial policy:** 25
- **Book Chapters:** 5 **Book:** 1
- **Master's dissertation theses: Advised and defended:** 12; **In Progress:** 0
- **Doctoral theses: Advised and defended:** 12; **In Progress:** 2
- **Postdoctorate Supervisions: Completed:** 1; **In Progress:** 0
- **Number of citations received in the international scientific literature**

Google scholar: #citations: 906 h-index: 16

Scopus: #citations: 363 h-index: 9

## 6) Links to the web pages

- ORCID: <https://orcid.org/0000-0003-1194-6400>
- Scopus: <https://www.scopus.com/authid/detail.uri?authorId=22433917100>
- Scholar: <https://scholar.google.com/citations?user=1T1roZkAAAAJ&hl=fr>
- **Personal webpage:** <https://www.cri.ensmp.fr/people/tadonki/>

## 7) Other Relevant Information

- **PC member of conferences:** WAMCA; WINSYS; CLOGREEN; HPCC; ICMS; PDCN; SBAC-PAD; PACT; ICCS; WCC; CCGRID; CloudTech; ICCEE; SIMBig; IJGHP; INCISCOS; MPP; CRI; CARLA; DMML; NBioT.
- **Conference organizer:** CLOUDTECH 2015-2023; WAMCA 2011-2024; HPC-Ed 2020;
- **Reviewer of a scientific journal:** *Journal of Supercomputing*; *Future Generation Computer Systems*; *Concurrency and Computation: Practice and Experience*; *Computational Optimization and Applications*; *ACM Transactions on Architecture and Code Optimization*; *International Journal of Grid and High-Performance Computing*; *Journal of Parallel and Distributed Computing*; *IEEE Transactions on Parallel and Distributed Systems*. **Editor for Future Generation Computer Systems (FGCS).**
- **Invited keynote speaker:** International Conference on Information Systems and Computer Sciences (INCISCOS – Ecuador 2017); Regional School of HPC (ERAD-RJ 2018 and ERAD-RJ 2020 – Brazil); International Conference on Multimedia Information Processing (CITIM – Algeria 2018); IEEE International Symposium on Computer Architecture and HPC (SBAC-PAD – Brazil 2019); WHPC (Brazil 2020).
- **Visiting professor:** April-June 2019 (UFF/ UERJ - USP – Brazil); September 2021 (UFF - USP – Brazil); July 2023 (USP – Brazil); May 2024 (UNA – Costa Rica)
- **Lecturer:** Cycle IC (Mines ParisTech - Paris) ; MS HPC-IA (Mines ParisTech - Nice) ; Brazil (Rio and Niteroi) ; Peru (Lima) ; Ecuador (Quito); Maroc (Oujda/Rabat); Rwanda (Kigali); Costa Rica (San Isidro).
- **List of visited countries for professional purposes:** Cameroon, Senegal, Madagascar, Rwanda, Algeria, Tunisia, Morocco, Egypt, Cameroon, France, Italy, Germany, Austria, Spain, Portugal, Finland, UK, Ireland, Switzerland, Denmark, Greece, Hungary, Finland, Switzerland, Netherlands, Romania, Poland, Ireland, China, Australia, India, Japan, USA, Canada, Brazil, Colombia, Ecuador, Chile, Peru, Martinique, Argentina, Mexico, Cuba, Costa Rica.

## 8) International Collaboration

- PhDs: France-Brazil 2010 - 2014/2018 – now; Morocco 2015-2018/2018-2024; Tunisia 2017-2020
- MINES ParisTech selection of Brazilian students USP/UNICAMP/UFRJ – 2015 and 2019.
- Invited keynote speaker at ERAD-RIO 2018 (<http://eradrj2018.ic.uff.br/>) and 2020.
- Visiting professor: April-June 2019 (UFF/ UERJ) ; Sept. 2021 (UFF); April 2023 (UFF); July 2023 (USP).
- French coordinator of the STIC-AmSud project BioCloud (France/Chile/Brazil) – From 2010 to 2014 (<http://www.cri.ensmp.fr/static/biocloud/>)
- Co-organizer and co-chair of the Workshop on Architecture and Multi-Core Applications since 2010.
- Keynote at INCISCO (Ecuador 2016); TPC Carla2024 (Chile); Co-Chair Simbig 2023 (Mexico)

