# Yves Robert - CURRICULUM VITAE Yves.Robert@ens-lyon.fr

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## Education

Agrégation de Mathématiques, 1980 Ph.D. Thesis, Applied Mathematics, Université de Grenoble, 1982 Doctorat es Sciences (Habilitation), Computer Science, Institut National Polytechnique de Grenoble, 1986

## **Professional appointments**

Permanent Researcher at CNRS, 1983-1988 Professor, Ecole Normale Supérieure de Lyon, 1988-present Professor of exceptional class since 2003 – highest position of the French system Visiting Scientist, IBM ECSEC Rome, 1986-1987 (contributed to the ESSL scientific library) Visiting Professor, Univ. Tennessee Knoxville, 1996-1997 (contributed to ScaLAPACK) Adjunct Professor at Ecole Polytechnique Paris, 1999-2001 Visiting Scientist, Univ. Tennessee Knoxville, 2011-present (algorithms and fault-tolerance at scale) Institut Universitaire de France (IUF)<sup>1</sup>: junior member, 1993–1998 and senior member, 2007-2017

#### Academic responsabilities

Head of CNRS-INRIA project ReMaP, 1995-2000

Head of Computer Science postgraduate studies at ENS Lyon, 1989-1995, and 2004-2007 Vice-head, then head of LIP, the computer science lab. of ENS Lyon, 1993-1997 and 1997-2001 Head of Computer Science Department at ENS Lyon, 2005-2008 INRIA executive director for JLESC, the Joint Laboratory for Extreme Scale Computing (with ANL, BSC, JSC, Riken, UIUC and UTK), 2014-present

## **Research** and publications

- Research topics: parallel algorithms, scheduling techniques, resilience
- 163 papers in international journals, 241 papers in international conferences. See complete publication list on home webpage
- Organization of several conferences, editing of 11 proceedings and 15 journal special issues
- H-index: 52; citations: 10,609 (according to Google Scholar on Jan. 11, 2019)

#### Student supervision

- Advisor of 33 completed and 5 on-going PhD theses
- Current position of the 33 former PhD students: 7 Full Professors, 4 Senior Researchers at CNRS or INRIA, 11 Associate Professors, 5 Permanent Researchers at CNRS or INRIA, 4 Engineers, 2 Post-doctorate
- Participation to 110 PhD and 22 Habilitation defense committees

#### Teaching

• Institutions: ENS Lyon, INP Grenoble, Ecole Polytechnique Paris, EPFL Lausanne, University of Tennessee at Knoxville, ECNU Shanghai

<sup>&</sup>lt;sup>1</sup>IUF is a prestigious institution that grants reduced teaching load (one third) and special funding to University Professors from all over France. There are around 30 senior members from all scientific and humanities disciplines elected each year, for a duration of 5 years. When elected in 2007, I was the only Computer Scientist of all IUF senior members.

• Pedagogical documents: 7 books, several class notes. Last monographs:

- H. Casanova, A. Legrand, and Y. Robert. Parallel Algorithms. Chapman & Hall/CRC Press, 2008

- Y. Robert and F. Vivien, editors. Introduction to Scheduling. Chapman & Hall/CRC Press, 2009

- A. Benoit, Y. Robert and F. Vivien. *Guide to algorithm design, methods, and complexity analysis,* Chapman & Hall/CRC Press, 2013

- T. Hérault and Y. Robert, editors, *Fault-tolerance techniques for high-performance computing*, Springer Verlag, 2015

#### Service to the Profession

- Former editorial board member of Integration, the VLSI journal, Parallel Processing Letters, and IEEE Trans. Parallel and Distributed Systems. Current editorial board member of JPDC (J. Parallel Dist. Computing), ACM TOPC (Trans. On Parallel Computing), Int. J. High Performance Computing Applications, Journal of Computational Science and Int. J. Grid and Utility Computing.
- Responsibilities in recent program committees:

- Program chair of HCW 2004 (IEEE Heterogeneous Computing Workshop), HiPC 2006 (IEEE Int. Conf. on High Performance Computing), IPDPS 2008 (IEEE Int. Parallel and Distributed Processing Symposium), ISPDC 2009 (International Symposium on Parallel and Distributed Computing), ICPP 2013 (Int. Conference on Parallel Processing) and HiPC 2013 (High Performance Computing)

- Program vice-chair of ICPP 2011, IPDPS 2003, 2005 and 2007, SC 2004 and 2014 (ACM Super Computing), ICPADS 2006 and 2008, HiPC 2012

- Panels Chair at SC 2017

- Steering committee member of IPDPS, HCW and HeteroPar

- President of the Computer Science hiring committee of ENS Lyon, 2001-2005 Member of several such hiring committees across France
- Member, IEEE Fellow Selection Committee, 2012-present. Vice-president of the Committee, 2014
- Parallel and distributed computing curriculum: since 2009, I have been involved in the NSF/TCPP initiative on the parallel and distributed computing (PDC) curriculum (see http://www.cs.gsu.edu/ ~tcpp/curriculum/index.php)

#### Major funding

- EC Project Esprit BRA 3280 "NANA" and Esprit III BRA "NANA2", 1989-1995
- Scientific Director of LHPC, joint laboratory for high performance computing with Matra (now Lagardère group), 1994-2002, managing several EC contracts (EuroTOPS PARALIN, ProxyTV) and contracts with *Ministère de l'Industrie* (CHARM, SPIHD)
- Head of TTN ProHPC, European center for the transfer of parallel computing technology to SMEs, 1997-1999
- Head of two white research contracts for the French Research Agency ANR: STOCHAGRID (2008-2010) and RESCUE (2011-2014)

#### Recent talks

- Keynote talk at IPDPS'2006 (Rhodes), ICCS'2007 (Beijing), HCW'2011 (Anchorage), ExaComp'2011 (Seoul), ExaComp'2013, IC3'2013 (New Delhi), P2S2'2013 (Lyon), CCGrid'2014 (Chicago), HiPC'2014 (Goa), FTS'2017 (Honolulu), SBACPAD'2018 (Lyon), Scala'2018 (Dallas), HPCS'2019 (Dublin)
- 40+ invited talks in various US universities since 2008

#### Awards and distinctions

- 3rd Price IBM France "Intensive Numerical Computing", 1988
- Bronze Medal of CNRS, 1988
- Grand Prix Informatique IBM France, 1991
- IEEE Fellow, for contributions to the design and analysis of parallel algorithms and scheduling techniques, 2005

- IEEE TCSC Award of Excellence in Scalable Computing, for outstanding contributions to parallel algorithms, scheduling techniques and resilience methods for large-scale distributed systems, 2014
- IEEE TCPP Outstanding Service Award, 2016
- IEEE CS Charles Babbage Award for contributions to parallel algorithms and scheduling techniques