

Christian Gamrat



Christian Gamrat is Chief Scientist and senior expert at CEA, LIST in the field of advanced embedded computing architectures and nanocomputing.

Graduated in Electrical Engineering and Information Processing from the "Université Joseph Fourier" and "Ecole Nationale Supérieure d'Electronique et de Radioélectricité" in Grenoble, he started his career at CEA/DSM Grenoble in 1981 on the design of high speed data acquisition systems for solid state and nuclear physics experiments.

He got involved in the study and design of Neural Networks computing machines in 1987 and led the team for the MIND-1024 neurocomputer project in 1989. The MIND-1024 neurocomputer has been used for various statistical physics simulation.

In 1994, he joined the Parallel Computing Architecture Lab of CEA near Paris where he finalized the development of the SYMPHONIE embedded massively-parallel computer for use on board military fighter aircraft.

In 1997 he started an activity on hardware reconfigurable computing and led the EPICURE national project as well as several other European projects in the field of dynamic reconfigurable computing (PICS, RECOPS).

In 2003 he initiated a research on novel computing architectures aimed at future nanotechnologies such as sub 30nm CMOS and molecular electronics.

He is now leading the Nanocomputing group at CEA LIST in Saclay near Paris.

He has led several European and National projects in the field of future computing system architecture such as EPICURE in 2002, FP6-ÆTHER in 2006 and is now currently managing project NABAB (FP7-216777) that aims at building bio-inspired nano-fabricated computing circuits.

Research interest

- Computer architectures for nano technologies
- Massively parallel and distributed computer architectures
- Reconfigurable computing
- Self-adaptive computing architectures
- Disruptive computing paradigms
- System-wide and holistic design of computing systems