



[http://www.artist-embedded.org/FP6/
IST-004527](http://www.artist-embedded.org/FP6/IST-004527)

Network of Excellence on Embedded Systems Design

Strategic Management Board

The Strategic Management Board leads the scientific policy of the Network of Excellence. It is the main decision-making body, and takes the major initiatives for implementing the Joint Programme of Activities.

Joseph Sifakis

VERIMAG (France)



ARTIST2 Scientific Manager

Name: Joseph Sifakis

<http://www-verimag.imag.fr/~sifakis/>

Title(s): CNRS researcher and the Director of Verimag laboratory
(<http://www-verimag.imag.fr/>), in Grenoble, France

Institution(s): VERIMAG Laboratory in Grenoble (F)

Joseph Sifakis is the scientific coordinator of the European IST Network of Excellence ARTIST2 on Embedded Systems Design.

(<http://www.artist-embedded.org/FP6/>)

He studied Electrical Engineering at the Technical University of Athens and Computer Science at the University of Grenoble.

Research interests:

Joseph Sifakis has worked on both theoretical and practical aspects of Concurrent Systems Specification and Verification. He contributed significantly to advancing the state of the art in verification methods and tools in the area of model checking for both untimed and timed systems. His current research interests include modeling, design and analysis of real-time systems with focus on composability and compositionality (<http://www-verimag.imag.fr/~sifakis/>).

Joseph Sifakis is a member of the editorial board of several journals, co-founder of the International Conference on Computer Aided Verification (CAV) and a member of the Steering Committee of EMSOFT (Embedded Software). He is the recipient of the CNRS Silver Medal in 2001.

Bruno Bouyssounouse

VERIMAG (France)



ARTIST2 Technical Manager

Name: Bruno Bouyssounouse

Title(s): Engineer

Institution(s): VERIMAG Laboratory in Grenoble (F)


Bruno Bouyssounouse leads the Technical Coordination of the Artist FP5 Accompanying Measure and the ARTIST2 Network of Excellence.

He has played a leading role in setting up the Artist2 NoE consortium and proposal, which was rated highest amongst those submitted under FP6 embedded systems. He is instrumental in setting up all of the Artist events

(<http://www.artist-embedded.org/FP6/ARTIST2Links/PastEvents/>), and publications (<http://www.artist-embedded.org/FP6/ARTIST2Links/MajorPublications/>).

His technical background is from Computer Science, with interests in both traditional computer science (language theory, operating systems, algorithms), and in embedded systems.

Karl Erik Arzen
Lund University (Sweden)

	<p><i>Research Topic (cluster): Control for Embedded Systems</i></p> <p><i>Cluster Leader</i></p>
	<p>Name: Karl-Erik Årzén http://www.control.lth.se/~karlerik/</p> <p>Title(s): Professor</p> <p>Institution(s): Department of Automatic Control, Lund University</p> <p><u>Research interests:</u> Årzén's research interests are real-time control, real-time and embedded systems, feedback scheduling, and industrial automation.</p>

Luca Benini

University of Bologna (Italy)



Research Topic (cluster): Execution Platforms

Name: Luca Benini

<http://www-micrel.deis.unibo.it/%7Ebenini/>

Title(s): Associate Professor

Institution(s): DEIS Università di Bologna

Research Interests:

Dr. Benini's research interests are in computer-aided design of electronic systems, with special emphasis on embedded, low-power applications, and in the design of ambient intelligence systems. On these topics he has published more than 200 papers in international journals and conferences and three books. His group has research cooperations with several large semiconductor companies, including STMicroelectronics, Samsung, Freescale, IBM, Infineon.

He has been program chair and vice-chair of Design Automation and Test in Europe Conference. He is a member of the technical program committee and organizing committee of several technical conferences, including the Design Automation Conference, the International Symposium on Low Power Design, the Symposium on Hardware-Software Codesign. He is a senior Member of the IEEE.

Albert Benveniste

Institut National de Recherche en Informatique et Automatique – INRIA
(France)



Research Topic (cluster): Hard Real Time
Cluster Leader

Name: Albert Benveniste

<http://www.irisa.fr/sigma2/benveniste/home.html>

Title(s): Cluster Leader for Hard RealTime Senior Researcher

Institution(s): INRIA

Research interests:

Include reactive systems, synchronous programming, and heterogeneous reactive systems. Industrial cooperation with TNI (Signal/Sildex).

Alan Burns

University of York (United Kingdom)



Research Topic (cluster): Adaptive Real-time

Name: Alan Burns

<http://www-users.cs.york.ac.uk/%7Eburns/>

Title(s): Professor – Head of the Department of Computer Science

Institution(s): University of York, UK

Research interests:

Cover a number of aspects of real-time systems including the assessment of languages for use in the real-time domain, distributed operating systems, the formal specification of scheduling algorithms and implementation strategies, and the design of dependable user interfaces to real-time applications.

Professor Burns has authored/co-authored over 370 papers/reports
<<http://www-users.cs.york.ac.uk/%7Eburns/papers.html>> and 10 books.

Many of these are in the real-time area. His teaching activities include courses in Operating Systems and Real-time Systems. He has close link with a number of industrial companies, particularly in the aerospace sector.

Giorgio Buttazzo

University of Pavia (Italy)



Research Topic (cluster): Adaptive Real Time

Cluster Leader

Name: Girogio Buttazzo

<http://feanor.sssup.it/~giorgio/>

Title(s): Associate Professor of Computer Engineering

Institution(s): University of Pavia, Italy

He graduated in Electronic Engineering at the University of Pisa in 1985, received a Master in Computer Science at the University of Pennsylvania in 1987, and a Ph.D. in Computer Engineering at the Scuola Superiore S. Anna of Pisa in 1991. During 1987, he worked on active perception and real-time control at the G.R.A.S.P. Laboratory of the University of Pennsylvania, in Philadelphia.

From 1991 to 1998, he held a position of Assistant Professor at the Scuola Superiore S. Anna of Pisa, doing research on robot control systems and real-time scheduling.

Research interests:

Include real-time operating systems, dynamic scheduling algorithms, quality of service control, multimedia systems, advanced robotics applications, and neural networks.

Ed Brinksma

University of Twente (Netherlands)



Research Topic (cluster): Testing and Verification

Name: Ed Brinksma

<http://wwwhome.cs.utwente.nl/%7Ebrinksma/>

Title(s): Prof. dr

Institution(s): University of Twente (Netherlands)

Ed Brinksma holds the chair of Formal Methods and Tools at the University of Twente in the Netherlands. His work concentrates on the application of formal methods to reactive systems, ranging from fundamental contributions to industrial applications, as well as methodological issues. In the past he has contributed to areas such as communication protocol specification, specification-based test generation, stochastic process algebra, and guided model checking. His current interests include testing theory for real-time systems, modelling and analysis of hybrid systems, and real-time scheduling synthesis.

Ed served as an editor for IEEE Transactions on Software Engineering, and is on the editorial boards of the Springer International Journals of Software Tools for Technology Transfer (STTT) and Software and System Modeling (SoSym). He is a founding member of the steering committee of the TACAS conference, and has served on the steering committees of PSTV/FORTE, ETAPS and PAPM.

Ed's research group participates in a great number of (inter)national research projects with both academic and industrial partners, including the European IST projects AMETIST (timed systems) and ARTIST (embedded systems).

Bengt Jonsson

Uppsala University (Sweden)

	<p><i>Research Topic (cluster):</i></p> <ul style="list-style-type: none">- <i>Modeling and Components (Cluster Leader)</i>- <i>Testing and Verification</i>- <i>Compilers and Timing Analysis</i>
	<p>- Name: Bengt Jonsson http://user.it.uu.se/~bengt/</p> <p>- Title(s): Prof.</p> <p>- Institution(s) Uppsala University, Department of Information Technology</p> <p><u>Research interests:</u> Modeling and verification of distributed and real-time systems. Has produced central results on automated verification, timing analysis, and compositional modeling techniques. Current research focus on verification, testing and modeling.</p> <p>Co-director of the center ASTEC (Advanced Software TEchnology) for industry-academia collaborative research.</p>

Kim Guldstrand Larsen

Aalborg / BRICS (Denmark)



Research Topic (cluster):

- *Testing and Verification (Cluster Leader)*
- *Modelling and Components*
- *Control for Embedded Systems*

Name: Kim Guldstrand Larsen

<http://www.cs.auc.dk/~kg/>

Title(s): Professor, Ph.D, Director of CISS

Institution(s): Computer Science, Aalborg University

BRICS

CISS

Since 1987 Kim Guldstrand Larsen has written and/or edited 10 books, published 27 papers in international journals, and more than 100 papers in international reviewed conferences. Has co-authored 6 software-tools and is prime investigator in the real-time verification tool UPPAAL (www.uppaal.com).

Co-inventor of the patented verification engine of the development tool visual STATE (www.iar.com). Kim Guldstrand Larsen has served as PC member for numerous conference (average 8 each year since 1996), been the initiator and SC member of CONCUR, TACAS and FORMATS.

Organizer and Conference Chair for ICALP'98, CONCUR'01, CAV'02 and FORMATS'03. Kim Guldstrand Larsen has lectured all over the world, including North-America, China, India, and most European countries. Kim Guldstrand Larsen is currently ranked no. 527 on the CiteSeer database of most cited Computer Scientist.

Rainer Leupers

RWTH Aachen (Germany)



Research Topic (cluster): Compilers, Timing Analysis

Name: Rainer Leupers

http://www.iss.rwth-aachen.de/1_institut/dok/leupers.htm

Title(s): Prof. Dr.

Institution(s): RWTH Aachen University of Technology

Integrated Signal Processing Systems

(co-directing the compilers and timing analysis cluster with Reinhard Wilhelm).

Rainer Leupers received the Diploma and Ph.D. degrees in Computer Science with honors from the University of Dortmund, Germany, in 1992 and 1997.

From 1997-2001 he was a senior research engineer at the Embedded Systems group at the University of Dortmund.

Between 1999-2001 he was also a project manager at ICD, where he headed the development of industrial software tool projects.

In 2002, Dr. Leupers joined RWTH Aachen University as a professor for Software for Systems on Silicon.

Research Interest(s):

His research and teaching activities revolve around software development tools, processor architectures, and electronic design automation for embedded systems, with emphasis on C compilers for application specific processors in the areas of signal processing and networking. He authored several books and numerous technical papers on software tools for embedded processors, and he served in the program committees of leading EDA and compiler conferences, including DAC, DATE, and ICCAD. Dr. Leupers received several scientific awards, including Best Paper Awards at DATE 2000 and DAC 2002.

He has been a co-founder of LISATek, an EDA tool provider for embedded processor design (acquired by CoWare Inc. in 2003).

Claude Oytana

Caisse des Dépôts et Consignations - CDC (France)



*ARTIST2 Coordinator
Financial and Legal Issues*

Name : Claude Oytana

<http://www.caissedesdepots.fr/2004/fr/index.htm>

Title: Professeur des universités Classe Exeptionnelle

Intitutions: Université de Franche Comté, Besançon, France 1985-1996 director of «laboratoire de Mécanique Appliquée» (110 people)

- Lab CNRS
- 1996-2001 president of the universit2 DE Franche comté
- 2001-2004 ministry of research in charge of engineering sciences and sustainable development

Research interests:

Mechanical engineering and material engineering.

Applications to energy production, engines, high pressure vessel, microtechniques.

Main customer companies: Peugeot and Renault cars, EDF, SNECMA, Aerospatiale, STmicroelectronics, l'Oreal, SMEs.

The Caisse des Dépôts et Consignations handles the financial and legal issues for the ARTIST2.

Alberto Sangiovanni-Vincentelli

PARADES EEIG (Italy)



Research Topic (cluster): Hard Real Time

Name: Alberto Sangiovanni-Vincentelli

<http://www.parades.rm.cnr.it/%7Ealberto/index.html>

Titles: Prof. Dr

Institutions: PARADES EEIG

Alberto Sangiovanni Vincentelli is the Edgar L. and Harold H. Buttner Chair of Electrical Engineering and Computer Sciences at the University of California at Berkeley, Co-Founder, Chief Technology Advisor and Member of the Board of Cadence Design Systems and the Scientific Director and Founder of PARADES, a European Group of Economic Interest supported by Cadence, Magneti-Marelli and ST Microelectronics.

He was also a co-founder of Synopsys. He is a member of the Board of Directors of UPEK, Sonics, Gradient and Accent. He is a member of the HP Strategic Technology Advisory Board and of the Scientific Advisory Committee of General Motors. He consulted for a number of US companies including IBM, Intel, ATT, GE, Harris, United Technology, Japanese companies including Kawasaki Steel, where he held the title of Chief Technology Advisor, Fujitsu, Sony and Hitachi, and European companies including ST Microelectronics, Alcatel, Daimler-Chrysler, Ericsson, Magneti-Marelli, BMW, Bull, and COMAU.

In 2002, he was the recipient of the Aristotle Award of the Semiconductor Research Corporation. In 2001, he received the prestigious Kaufman Award of the Electronic Design Automation Council for pioneering contributions to EDA.

He is an author of over 650 papers and fifteen books in the area of design tools and methodologies, large-scale systems, embedded controllers, hybrid systems and innovation. He participates and co-directs the Hard Real Time Cluster of Artist.

Dr. Sangiovanni-Vincentelli has been a Fellow of the IEEE since 1982 and a Member of the National Academy of Engineering, since 1998.

Lothar Thiele

ETHZ

Swiss Federal Institute of Technology – Zurich (Switzerland)



Research Topic (cluster): Execution Platforms

Name: Lothar Thiele

<http://www.tik.ee.ethz.ch/%7Ethiele/>

Titles: Prof. Dr.-Ing. habil.
Institutions: ETH Zurich

He received his Diplom-Ingenieur and Dr.-Ing. degrees in Electrical Engineering from the Technical University of Munich in 1981 and 1985 respectively. After completing his Habilitation thesis from the Institute of Network Theory and Circuit Design of the Technical University Munich, he joined the Information Systems Laboratory at Stanford University in 1987.

In 1988, he took up the chair of microelectronics at the Faculty of Engineering, University of Saarland, Saarbrücken, Germany.

He joined ETH Zurich, Switzerland, as a full Professor of Computer Engineering, in 1994. His research interests include models, methods and software tools for the design of embedded systems, embedded software and bio inspired optimization techniques.

In 1986 he received the "Dissertation Award" of the Technical University of Munich, in 1987, the "Outstanding Young Author Award" of the IEEE Circuits and Systems Society, in 1988, the Browder J. Thompson Memorial Award of the IEEE, and in 2000-2001, the "IBM Faculty Partnership Award". In 2004, he joined the German Academy of Natural Scientists Leopoldina.

Reinhard Wilhelm

Saarland University – Saarbruecken



Research Topic (cluster): Compilers, Timing Analysis

Reinhard Wilhelm

<http://rw4.cs.uni-sb.de/users/wilhelm/wilhelm.html>

Informatik
Saarland University
Saarbruecken

Dr. rer. nat. TU Munich, 1977.

Professor for Computer Science at Saarland University since 1978.

Scientific Director of the International Research and Conference Center for Computer Science in Schloss Dagstuhl since 1990.

Scientific Director of the Cluster for Compilation & Timing Analysis in Artist2

Research Activities relevant for Embedded Systems:

➤ Compiler Construction for Embedded Processors:

Post-pass code optimizations resulting in extremely high code quality.

Commercialization of a tool, aiPop, by the spin-off company AbsInt,

cf. <http://www.absint.com/aipop/>

➤ Program analysis:

Design and implementation of program analyses for the determination of worst-case execution times incorporating cache and pipeline behaviour predictions.

This research resulted in the first set of commercial tools, aiT, for the determination of worst-case execution times, marketed also by AbsInt and used in the aeronautics and automotive industries,

cf. <http://www.absint.com/wcet.htm>

This development received a 2004 European IST Prize.

➤ Visualization:

The powerful graph-layout tool vcg, Visualization of Compiler Graphs, is result of doctoral work at the chair of Reinhard Wilhelm.

Further development at AbsInt led to the commercial tool aiSee used worldwide both in commercial as well in academic applications,

cf. <http://www.absint.com/aisee/>