

EDCC 2010



Eighth European Dependable Computing Conference
Valencia, Spain, April 28-30, 2010

<http://edcc.dependability.org/>



Workshop CARS

Critical Automotive applications: Robustness & Safety

April 27, 2010

Call for Contributions

Workshop objectives

The increasing range and complexity of automotive applications, the need to master development costs using off-the-shelf components, the coexistence of critical and non-critical applications, and the emergence of new architectural paradigms may have a strong impact on dependability of automotive embedded systems. This situation calls for novel design and validation methods, but also tools to improve the robustness of automotive systems and their safety properties. The evolution of automotive systems is currently supported by standards (like AUTOSAR and ISO26262) that respectively advocate a software architecture but also recommend specific development approaches.

The goal of the workshop is to bring together researchers and practitioners interested in the design, implementation and operation of critical automotive applications and systems. Particular emphasis will be put on dependability issues, software engineering for robustness, security and safety issues, real time embedded systems technologies, architectural solutions and development processes for dependable automotive embedded systems.

Topics of interest for the workshop include (but are not limited to):

- Architectures for robust automotive application.
- Hardware mechanisms for dependable automotive systems.
- Real-time operating systems, WCET estimation, etc.
- Coordination, communication, networking and distributed control architectures.
- Analysis and verification techniques for automotive systems.
- Middleware and tool support for dependable embedded automotive systems.
- Safety architectures, processes, analyses, and standards .
- Failure data collection and analysis, diagnosis approaches.
- Practical experience and case studies on critical applications.
- Modelling and code generation techniques.

Primary application areas of interest to the workshop focus on the **automotive domain**. However, methods and techniques developed in other fields of application of critical embedded systems (e.g., avionics, railways, space, etc.) can be of interest for the automotive domain.

Organizers

Jean-Charles Fabre (LAAS-CNRS, Toulouse, France)
Olivier Guetta (Renault TechnoCentre, Paris, France)
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Program committee

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Schwarz	Jürgen	Daimler AG	Germany
Simonot	Françoise	INRIA	France
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Submission information

To contribute to the workshop, authors are invited to submit a position paper of no more than 4 pages (10-pt font, single space, double-column format, IEEE styles).

The submission of contributions can be made through the CARS workshop page <http://www.laas.fr/CARS@EDCC2010>.

The program committee will carefully review each position paper. The review will focus not only on the paper's quality but also on its novelty and ability to engender fruitful discussions. All authors of accepted position papers are invited to attend the workshop. Authors of accepted papers must guarantee that their paper will be presented at the workshop. The accepted papers will be published on line.

Important dates

Workshop papers submission deadline:	20 January 2010
Workshop papers acceptance:	5 March 2010
Camera ready workshop papers:	26 March 2010
EDCC Workshops date:	27 April 2010

Sponsors

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