



Call for Participations International Workshop on Automotive Requirements Engineering (AuRE 2004)

<http://www.nise.org/AuRE/>

September 11, 2004, Nanzan University, Nagoya, Japan

In Conjunction with RE '04 (<http://www.re04.org>) and in Commemoration of the establishment of Graduate School of Mathematical Sciences and Information Engineering, Nanzan University



Workshop Co-Chairs

Mikio Aoyama,
Nanzan Univ., Japan
Frank Houdek,
DaimlerChrysler AG, Germany
Takashi Shigematu,
Toyota Motor, Japan

Program Committee

Kiyoshi Agusa,
Nagoya Univ., Japan
Manfred Broy, *Technical Univ. of Munich, Germany*
Carlo Ghezzi, *Politecnico di Milano, Italy*
Hiroshi Kamiyama,
Nissan Motor, Japan
Takuya Katayama, *JAIST, Japan*
Shigeyuki Kawana,
Toyota Motor, Japan
Ingolf Krüger, *Univ. of California, San Diego, USA*
Hiroyuki Murayama,
Denso, Japan
Klaus Pohl, *Univ. Duisburg-Essen, Germany*
Alexander Pretschner,
ETH, Switzerland
Masahiko Watanabe,
CATS, Japan
Matthias Weber,
DaimlerChrysler AG, Germany

Local Arrangement Chair

Masami Noro,
Nanzan Univ., Japan

About Nagoya

Nagoya is the third largest city in Japan and the heart of quality Japanese design and manufacturing, called Monozukuri. Especially, the city is a center of Japanese automotive industry including Toyota and its group companies, Honda, Mitsubishi and Suzuki. You can experience at Toyota Commemorative Museum of Industry and Technology, or Toyota Automotive Museum.

Manufacturing industry in Nagoya originated from pottery: Seto is one of the most popular pottery and Noritake and ceramic industry are also located here.

Nagoya faces beautiful pacific coast in the south and rich forests in the north.

Nagoya has its unique taste of culture, famous Nagoya castle, Nagoya cuisine, and traditional crafts.

Around Nagoya, World Exposition will be held in 2005.

Motivation and Workshop Objective

Over the last years, software has become one major force in automotive business. Model premium cars embody often more than 50 electronic control units with several hundreds of thousands line of software running on them. More than 80 percent of automotive innovations are driven by electronics, and amongst them, 90 percent are implemented by means of software. A large portion of this software is not implemented by the OEMs themselves but by external suppliers. Without a proper *Requirements Engineering*, mature software and system development is hardly possible. But not only the high system complexity and OEM-supplier relationships force rigid *Requirements Engineering*. Sometime we see also need to properly consider distributed development activities, where, for example, software systems are implemented by geographically-distributed subcontractors and/or with COTS components supplied by different vendors globally distributed. In these setting, requirements management becomes even more challenging.

The workshop **Automotive Requirements Engineering (AuRE)** aims to bring together practitioners and researchers to discuss problems in this area as well as potential or even implemented solutions.

Advanced Program (Tentative)

9:30--12:00 Session 1: Welcome and Keynotes

Welcome

Keynote 1: Shigeyuki Kawana, Toyota, Japan

Keynote 2 Frank Houdek, DaimlerChrysler AG, Germany

12:00--13:00 Lunch (provided)

13:00--15:00 Session 2A Requirements Engineering for Automotive Product-Lines

Why is it not Sufficient to Model Requirements Variability with Feature Models?, *S. Buhne, K. Lauenroth, and K. Pohl, Univ. of Duisburg-Essen, Germany*

A Goal and Scenario Oriented Requirements Analysis Method for Product families in an Automotive Context, *M. Kim, H. Yang, S. Park, Sogang Univ., Korea*

Integration of Requirements into Model-Based Development, *M. Conrad, I. Frey and K. Buhr, DaimlerChrysler, Germany*

Model-Base Development in Automotive Software, *N. Kawai, CATS, and H. Watanabe, Tokai Univ., Japan*

13:00--15:00 Session 2B UML Based Requirements Engineering and Practice

Modeling of Automotive Wiper and Washer System using UML, *T. Sugimoto, E. Tamai, K. Nakahara, and S. Hida, EXARS, Japan*

Specifying Requirements for Nomadic Media in Automotive Systems, *L. Krzanik, J. Jaakola, M. Nurmi, T. Pieski, and K. Stenbak, Univ. Oulu, Finland*

A Methodology for UML-Based Requirements Analysis Training Program and its Experience, *A. Higashi, M. Ohba, R. Ishida, Denso.E&TS Training Center, and M. Aoyama, Nanzan Univ. Japan*

A Quantitative Approach to the Design of the Center Console of Automobiles, *M. Sasaki, F. Ishizaki, A. Suzuki, I. Takami, Y. Tanaka, Nanzan Univ., E. Yamamoto, and K. Nakashima, Kojima Press Industry, Japan*

15:15--16:30 Panel: Future Perspective on Automotive Requirements Engineering

TBD

17:00--19:30 Tour and Reception at Toyota Automobile Museum (Shuttle bus service will be provided to the museum, and from the museum to JR Nagoya Station after the reception)

Registration

To participate, please register from RE '04 Webpage at <http://www.re04.org>.

For further information, please e-mail to info_aure04@nise.org.



Nagoya Castle



Nagoya Station



Toyota Automobile Museum



Kasadera Temple Festival