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. Lauernroth, 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

Specifying Requirements for Nomadic Media in Automotive Systems, L. Krzanik, J. Jaakola, M. Nurm, T. Pieski, and K. Stenbak, Univ. of 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


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

TBD

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.