

Preface

The Workshop on Modeling in Automotive Software Engineering (MASE'15) was held on September 27, 2015 in Ottawa, Canada, in collaboration with the ACM/IEEE 18th International Conference on Model Driven Engineering Languages and Systems (MODELS'15). It was the first time that a workshop on automotive software engineering was hosted at MODELS.

Automotive software was born less than 40 years ago. The first production automotive microcomputer ECU was a single-function controller used for electronic spark timing in the 1977 General Motors Oldsmobile Toronado. Within just 40 years, the significance, size, and development costs of automotive software has grown to staggering levels. A consequence of this development is that the automotive industry is increasingly relying on and becoming a driver of advances in software development and engineering methods, techniques and tools to deal with the many unique challenges the automotive industry faces.

Modelling and model-based approaches to software development already have a long tradition in the automotive industry due to, e.g., the high need for abstraction, standardization and interoperability. It is reasonable to believe that advances in modelling will be key to further advancing automotive software engineering as well. A central objective of the workshop is to provide a forum for practitioners and researchers from industry and academia in which novel, innovative, model-based solutions to current and future challenges in automotive software development can be presented and discussed. Another important objective is the identification of new research problems arising from current trends.

The workshop received 17 submissions of which 7 were included into the program. Industrial participation was high with co-authors from several companies including Daimler, Volkswagen, Audi, Volvo, Robert Bosch, Arcticus, and AVL. The program was complemented by a keynote on “Automotive Models in Practice” by Robert Baillargeon, Principal Consultant for Method Park America and a panel discussion on future research directions. For the panel, Robert was joined by Krzysztof Czarnecki (University of Waterloo) and Bran Selic Malina Software Corporation).

Acknowledgements

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The MASE'15 Co-Organizers

Jo Atlee

Michal Antkiewicz

Juergen Dingel

Ramesh S