



Accident avoidance by active intervention for Intelligent Vehicles

Press Release

University of Passau participates in EU-Project for Accident Avoidance Systems

Passau, September 9th, 2011, FORWISS Institute at University of Passau works jointly with automobile manufacturers and suppliers to develop the next generation of Saftey Systems in intelligent vehicles. Demonstrator vehicles in the EU-funded project *interactIVe* will test the first software modules in autumn 2011.

Started in 2010, the European research project interactIVe takes the next step towards our vision of accident-free traffic, thanks to active intervention technologies in intelligent vehicles.

The interactIVe (accident avoidance by active intervention for intelligent vehicles) project addresses the development and evaluation of next-generation safety systems for intelligent vehicles. Based on active intervention the driver will be supported in hazardous situations. In contrast to currently available advanced driver assistance systems (ADAS) that are typically implemented as independent functions, interactIVe is based on the concept that by integrating applications together, vehicle components may be shared among the various safety systems.

Sensing environment is a major cornerstore for many intelligent vehicle applications (collision avoidance, collision mitigation, lane departure warning, adaptive cruise control). Within the interactIVe integrated project the perception platform represents an essential part of the system. For advanced safety systems, highly reliable information about the vehicle's environment is required for the control of actuators. By combining the information from different sensors, innovative sensor data fusion methods will be pursued to achieve a high degree of sensor reliability and to obtain more solid information about the environment. Apart from well-known sensor technologies like radar and vision, information sources such as digital map databases and C2X communication will enhance the perception of the environment.

FORWISS investigates and applies novel research approaches to improve the efficiency and quality of sensor data fusion. The team is engaged in attention-focused data fusion for emergency situations by controlling the fusion system based on areas of interest. This includes ways to trigger the perception system from the application in order to prioritise certain objects in close environment, verification of these objects in an emergency mode and returning to standard processing. FORWISS develops modules for the recognition of unavoidable crash situations and camera based road detection systems.

University of Passau was involved in a previous project from 2004 to 2008 working on collision avoidance and collision mitigation.

2/3

About University of Passau

By offering unique interdisciplinary study courses — and keeping close ties to other top research institutions as well as to the private sector — the University of Passau has been able to attract highly qualified students and build a strong international alumni network. Degree programmes in subjects such as Computer Science, Economics, Law and Cultural Studies are ranked among the best in Germany. All academic departments are superbly equipped and focused as much on interdisciplinary and applied learning as on their respective fields of research.

The university owes its excellent reputation in particular to its unique interdisciplinary, internationally oriented courses whose graduates are much sought after on the employment market in Europe - and beyond. One of the key advantages for many is the range and specialisation of language classes offered.

Contacts

Dr. Erich Fuchs, CEO FORWISS, University of Passau Innstraße 43, D-94032 Passau, Germany Phone: +49 (0) 851/509-31 47 Email: <u>erich.fuchs@uni-passau.de</u>

Coordinator

Communication Manager

Aria Etemad Ford Research & Advanced Engineering Europe Suesterfeldstr. 200 52072 Aachen, Germany Phone: + 49 241 9421 246 Email: aetemad1@ford.com Sarah Metzner European Center for Information and Communication EICT Ernst-Reuter-Platz 7 10587 Berlin, Germany Phone: +49 30 3670 235 18 Email: <u>sarah.metzner@eict.de</u> Technical Dissemination Manager Angelos Amditis Institute of Communication and Computer Systems ICCS 9, Iroon. Polytechniou Str. 157 73 Zografou, Greece Phone: +30 2107722398 Email: a.amditis@iccs.gr

Note to the editor

interactIVe is an Integrated Project supported by the European Commission Directorate-General Information Society and Media in the Seventh Framework Programme.

Duration: January 1 st 2010 - June 30 th 2013	
---	--

Total cost: EUR 30 Million

Coordinator: Ford

Partners:

Ford, BMW Group Research and Technology, Centro Ricerche Fiat, Daimler, Volvo Cars Corporation, Volvo Technology Corporation, Volkswagen, Autoliv, Continental, Delphi Delco Electronics Europe, Navteq, TRW, The Federal Highway Research Institute (BASt), The Galician Automotive Technology Centre (CTAG), German National Research Center for Aeronautics and Space (DLR), Institute of Communication and Computer Systems (ICCS), Institut für Kraftfahrzeuge – RWTH Aachen University (ika), Netherlands Organisation for Applied Scientific Research TNO, VTT Technical Research Centre of Finland, Lund University, Université Joseph Fourier Grenoble, Chalmers University of Technology, University of Passau, Czech Technical University in Prague, University of Trento, Allround Team, Alcor, European Center for Information and Communication Technologies EICT. September 9th, 2011, University of Passau participates in EU-Project for Accident Avoidance Systems $3\,/\,3$

Website: <u>www.interactIVe-ip.eu</u>