Dr.-Ing. Reiner Hartenstein
Professor, TU Kaiserslautern

Dr.-Ing. Reiner W. Hartenstein is professor of Computer Science and Engineering at Kaiserslautern University of Technology (TU Kaiserslautern), where his more recent research focuses on Reconfigurable Computing (RC), Reconfigurable Supercomputing, Configware / Software Co-Compilation, and design flows for RC in embedded systems. Reiner Hartenstein is an IEEE life fellow, FPL fellow, and member of the ACM. He has published more than 400 professional papers at journals and conference proceedings and has authored or co-edited 14 books. Reiner Hartenstein frequently receives invitations to give keynote addresses at international conferences. In 1981 he has been visiting professor at University of California at Berkeley.

Before joining TU Kaiserslautern he was a professor at University of Karlsruhe. He has graduated more than 100 M.S. and 25 Ph.D. students, and meanwhile 8 of them are professors. He acquired extensive government and industrial research funding, received several awards, and consulted for more than 10 international companies. Hartenstein is and has been member of several steering committees and numerous program committees of international conferences. He is founder of two international conference series and co-founder of two more of such series. He also has been general chair and industrial chair, as well as 10 times program chair of international conferences.

Reiner Hartenstein received all his academic degrees from the EE Department at University of Karlsruhe (TH), where he has been the first graduate student and a Ph. D. student of Karl Steinbuch, the pioneer of artificial neuronal networks. Hartenstein's background from earlier activities also covers pattern recognition, image processing, hardware description languages, and VLSI design tools and methods. From the early 80ies he is known as the founder of the German Multi University VLSI Design Project "E.I.S. Project" for innovating education at CS and EE departments in Germany. That's why Lynn Conway has called him "the German Carver Mead". He is the author and implementer of the early (mid 70ies) trailblazing hardware description language KARL. His book introducing this language in 1977 has become a best-seller.

For bridging the fragmentation of the rapidly growing embedded systems discipline into the special cultures of its many different application scenes, Hartenstein advocates fundamental CS curricular upgrades from von-Neumann-centric (vN, instruction-stream-based mind set dominating) over to a duality of basic models (combining vN and antimachine) by merging the traditional instruction-stream-based mind set with a data-stream-based mind set coming along with the growing pervasiveness of FPGA usage and Reconfigurable Computing. Hartenstein claims, that without such curricular revisions the decline of enrolment will continue and our CS and CS-related graduates are not sufficiently offshoring-resistant and are not qualified for the current and future labor market, more and more dominated by embedded systems applications.