

Bio Sketch of Peter Rössler

Prof. (FH) DI Dr. Peter Rössler

<https://embsys.technikum-wien.at/staff/roessler/>



Biography: Peter Rössler received his diploma and doctoral degree from the Vienna University of Technology, Austria. Besides his work as a lecturer and director of the study program “Electronics/Business” at the University of Applied Sciences Technikum Wien in Austria (where he is full-time employee since 2005) his main work focuses on acquisition and management of R&D projects in the field of embedded computing systems. His research interests cover topics like FPGA design, digital ASIC design, electronic system-level design as well as fieldbus technologies in various applications areas (building automation, computer vision & measurement systems, automotive electronics, clock synchronization in computer networks or safety-critical systems). He is co-founder of a company related to building automation systems. Peter Rössler is author of 70+ publications.

His recent research has its focus on Field-Programmable Gate Arrays (FPGAs) that evolved from implementing small glue-logic designs to large, configurable multi-processor System-on-Chips (SoC). For example, as a head of the public funded “Josef Ressel Center” INES (Innovative Platforms for Electronic-Based Systems) he is responsible to investigate research topics such as high-level synthesis, hardware/software co-design or fault-tolerant design techniques related to (SoC) FPGAs with a number of Austrian industry partners. Another R&D project named “FPGA 4.0” addresses security issues of FPGAs and covers their analog counterparts, called FPAA (Field-Programmable Analog Arrays), as well. In a “Research Studio Austria” named COORDES (Coordinated Test, Debugging, and Diagnosis in Distributed Embedded Systems) a prove-of-concept of a radically new patent-registered method for test and debugging of networked embedded systems has been implemented, using FPGAs as well as MPW-based ASIC prototyping, just to name another recent activity.

Peter Rössler is member of several program committees of national and international scientific conferences and is engaged in boards of national organizations like the Austrian Association of Electronic Engineering (OVE) or the Austrian Society of Microelectronic Systems (GMS). From 2012 to 2014 he was Chair of the IEEE Austrian Section. Peter Rössler is member of the IEEE and the OVE.