

EECS Seminar Series



Dr. Bernhard Rinner

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“Challenges and Opportunities of Distributed Smart Cameras”

Wednesday, May 20, 2009 • 2:00 p.m. • Harris Center (HEC) 101

Distributed smart cameras are real-time distributed embedded systems that perform computer vision using multiple cameras. Smart cameras perform substantial image processing onboard delivering only features of the observed scene and collaborate to overcome some problems of centralized or single-camera systems. This interdisciplinary field builds upon techniques from computer vision, distributed computing, embedded computing and sensor networks.

In this talk I will introduce smart cameras and their potential for various applications such as smart environments, security, entertainment and health care. I will then focus on the fundamental challenges of performing real-time vision on distributed embedded platforms and address recent research topics. A presentation of case studies of distributed smart cameras will conclude this talk.

DR. BERNHARD RINNER

Bernhard Rinner is a Full Professor and chair of pervasive computing at Klagenfurt University (Austria) where he is currently serving as Vice Dean of the Faculty of Technical Sciences.

He received both his PhD and MSc in Telematics from Graz University of Technology in 1996 and 1993, respectively. Before joining Klagenfurt he was with Graz University of Technology and held research positions at the Department of Computer Sciences at the University of Texas at Austin in 1995 and 1998/99. His current research interests include embedded computing, embedded video and computer vision, sensor networks and pervasive computing. He has authored and co-authored more than 100 papers for journals, conferences and workshops has led many research projects and has served as reviewer, program committee member, program chair and editor-in-chief.

Prof. Rinner has been co-founder and general chair of the ACM/IEEE International Conference on Distributed Smart Cameras and has served as chief editor of a special issue on this topic in The Proceedings of the IEEE. He is member of the IEEE, IFIP and TIV (Telematik Ingenieurverband). (<http://www.uni-klu.ac.at/tewi/ict/nes/pc/>)