Universität Passau
Fakultät für Informatik und Mathematik

Kolloquium

Herr Prof. Dr. Hermann de Meer
lädt zu folgendem Vortrag ein:

Am Dienstag, den 6.2.2024 ab 17:00 Uhr trägt
Herr Dr. Jacek Rak
im Hörsaal 11, IM, Innstr. 33 der Universität Passau vor

Resilience of Communication Networks and Networked Systems: Cost and Benefits

Dr. habil. Jacek Rak, Prof. (Gdansk University of Technology, Poland)
PICAIS Fellow University of Passau

The public lecture will explain the need to invest in resilience mechanisms in communication networks and networked systems. It will start by investigating the common scenarios for failures of network elements and provide their classification referring to the number, location, duration, and extent of failures. Next, it will focus on explaining the role of resilience mechanisms in providing an acceptable level of service delivery in challenging conditions. The later part of the lecture will analyze the potential costs and evident benefits following the deployment of resilience mechanisms. The final part of the lecture will comment on the major challenges to deploying resilience mechanisms in networks. Jacek Rak received the M.Sc., Ph.D., and D.Sc. (Habilitation) degrees from the Gdansk University of Technology, Gdansk, Poland, in 2003, 2009, and 2016, respectively. He is currently the Head of the Department of Computer Communications at Gdansk University of Technology. From 2016 to 2020, he led the COST CA15127 Action Resilient Communication Services Protecting End-User Applications From Disaster-Based Failures (RECODIS), involving over 170 members from 31 countries. He has authored over 100 publications, including the book Resilient Routing in Communication Networks (Springer, 2015). His main research interests include the resilience of communication networks and networked systems. He was the TPC Chair of ONDM 2017 and the TPC Co-Chair of IFIP Networking 2019. He is a member of the editorial board of Optical Switching and Networking (Elsevier) and Networks (Wiley) and the Founder of the International Workshop on Resilient Networks Design and Modeling (RNDM). He is a visiting PICAIS fellow at the Chair of Computer Networks and Computer Communications (Prof. Hermann de Meer), focusing on the disaster-resilience of interdependent networked systems.