Georg Carle: Research Interests

Topics
Network measurements
• High-performance packet processing
• Internet-scale infrastructure properties
• Reproducibility

Network architecture
• Low-latency communication and latency guarantees
• Network function chaining and virtualization
• Network resilience and adaptive configuration
• Network security and privacy

Methods
Automated performance measurements in testbed
Large-scale distributed measurements
Automated, formal methods for network security configuration
Topics for Discussions

Reproducibility
- What are suitable reference scenarios/benchmarks?
- When to use artificial traffic, and when to use realistic/real traffic?
- Are we aware network experiments that are hard to reproduce?

High performance packet processing
- Which challenges/limitations to look at in packet processing?
- Which role do coprocessors / FPGAs have in the network stack?

SDN and Virtualisation
- What are relevant research challenges for SDN, for NFV?
- Which SDN controllers, applications are relevant for deployment?
- Which open security challenges do we have in SDN networks?

What is the future relevance of the following Hot Internet Topics?
- ONOS, P4, Blockchain, Certificate Transparency, ...
- Information-Centric Networking; Delay-Tolerant Networking; Resource Public Key Infrastructure (RPKI); ...