

Abstract:

Latency is a key issue for future communication, to be achieved at ever-growing bandwidth per user. While the HTTP-TCP-IP stack of today's Internet has fueled an enormous growth in Internet service provisioning, it is also a source for significant inefficiencies in terms of latency as well as bandwidth usage (e.g., due to the unicast delivery model of HTTP). In this talk, I will present approaches to address those challenges by flattening the Internet protocol, leading not only to 'slimmer' terminal architectures but also the proliferation of devices dedicated to specific services only (e.g., HTTP-only devices), while being backward compatible towards current Internet services. Use cases will not only showcase benefits in traditional video delivery, including VR/AR, scenarios but also outline opportunities for new experiences through heavily distributed devices that are fluidly assembled for specific user experiences.