Abstract: Next generation Internet is expected to focus more on large-scale media/content distribution rather than the communication infrastructure. In this talk, a brief review of some content resolution and delivery approaches for information-centric networks will be given. I will then present the CURLING: Content-Ubiquitous Resolution and Delivery Infrastructure for Next Generation Services. It aims towards the realization of future information-centric Internet by overcoming various intrinsic constraints within the current Internet on efficiently diffusing massive media content across the global world. The approach natively supports content manipulation capabilities covering the entire lifecycle of content, from content publication to content resolution and finally, the delivery of content at Internet scale. The CURLING infrastructure offers both content providers and customers high flexibility in expressing their distinct location preferences when publishing/requesting content, thanks to the proposed content *scoping* and *filtering* functions. Relevant content manipulation operations can be driven by a variety of factors including the business relationship between Internet Service Provider (ISP) networks, content provider and customer preferences and also local ISP policies. The content resolution operation is also natively coupled with optimized content routing techniques that enable efficient unicast and multicast-based content delivery in inter-domain environments.

The content of the talk is based on the work listed below:

References: