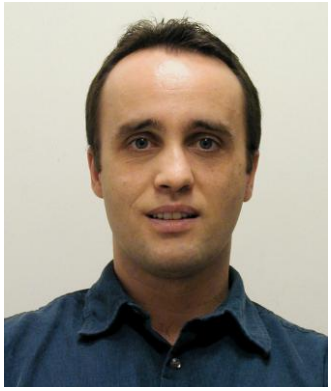
2011 Global Future Internet Week

Imperial Palace Hotel, Seoul, Korea, Nov 27~Dec 5, 2011

○ Presentation Schedule

Program	GFI Summit
Date	02/12/2012
Session	Paradigm Shifts: ICN/DTN

○Curriculum Vitae

Photo		**Name**	Dirk Trossen
		Company	Cambridge University
Department	Computer Laboratory	**Position**	Senior Researcher
Curriculum Vitae	Dirk Trossen, Senior Researcher in the Computer Laboratory at Cambridge University, has 15 years of experience in network architectures, services and wireless technology. His main contributions are in the area of inter-domain networking, focusing on seamless handovers and physical network overlays. His research involves the design of network solutions for multi-access environments, building on novel concepts for virtual network operators. He also designed an architecture and platform solution for participatory mobile-centric wireless sensing, based on available Java-enabled mobile phones and available under open source license, within his work on context-aware services and architectures. He is currently returning to his research on large-scale publish-subscribe systems, now in the context of the Future Internet and possible novel internetworking solutions. Pursuing his interests in the intersection of technology and economics, Dirk co-chaired for more than two years the Value Chain Dynamics working group in the Communications Futures Program at MIT as well as for almost three years the Privacy & Security working group in the same consortium. He is currently the technical lead for the EIFFEL think tank of international Internet researchers as well as the PSIRP FP7 project. He also technically leads a TSB-funded project on lifestyle management. Prior to Cambridge University, Dirk was Chief Researcher at BT Research from 2007 to 2009 and Senior Principal Scientist with Nokia Research from		

	2000 to 2007. He is also a Research Affiliate with the Advanced Network Architecture group at MIT CSAIL. He holds a Ph.D. degree in Computer Science from Technical University of Aachen, Germany and diploma degree in Mathematics from the same university. He published more than 50 peer-reviewed papers in international conferences and journals and holds currently 25 international patents in various areas.

○Presentation Summary (Only for Speaker)

Title	Marrying Computation and Communication: A Different Take on Information-Centric Networking
Summary	Information-centric networking has been promising an increased efficiency of dissemination information or content over the Internet. But the current Internet has proven that it is able to accommodate the transfer of information in orders of magnitudes unforeseen by any of their forefathers. So we assert that information-centric networking cannot be merely about disseminating information *because the current Internet is no good at it*! Instead, it is our hypothesis that information-centric networking represents a systems approach that operates on graphs of information with a late (as late as possible) binding to a location at which the computation over this graph is going to happen. It is this systems approach that enables the full potential for optimization across the full range of computational availability and the available information space! The promises of this hypothesis are a more resilient and robust, more flexible, more efficient and greener Internet that better aligns interests (e.g., economic, security, social) of their stakeholders. While we clearly recognize that we have no final proof for this hypothesis, we have early indications for it. This talk will outline the current work in this field and shed some more light on this different argumentation for information-centric networking.