



ICN 2016 panel “Five years later...”

ACM ICN 2016
Kyoto, Japan, Sept 27, 2016

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Topics I brought up 2011

- Rights issues
- Resource management
 - Cache
 - Traffic
 - Congestion control
- Design choices (naming, routing/resolution)

Thoughts

- We built a pretty strong community!
 - ICN ws/conference, NOMEN, Dagstuhl, ICNRRG, NDN and CCN communities
- More design diversity in 2011
 - several ICN architectures being actively designed and implemented – now more focus on CCN/NDN
- Shift from architectural work to details of mechanisms and to applications

Challenges

- **ICN is the only real alternative networking paradigm that came up in all the “Future Internet” research!**
 - *But has ICN renewed networking?*
 - No - not if you mean deployed infrastructure, or impact at general networking conferences
 - Yes - if you mean the concept of communication using named data
 - we increasingly see named data in applications/services (version control systems, media distribution, Windows updates, ...) but can perhaps not always claim ICN research as the origin
- **How do we bring all good research on ICN into mainstream networking?**
 - Piece-by-piece
 - receiver-driven properties?, multi-path?, hop-by-hop congestion control?
 - As part of single applications/services
 - Domain-specific infrastructure
 - IoT, content distribution, ???