

Data Centric Networking: Paper Review Presentation Assignment

2011/01/27 Session 2: Content-Based Networking (CBN) and Content Distribution Networks (CDN)

Todor Minchev (one of following 3 papers or combined any of them)

1.1 A. Carzaniga, D.S. Rosenblum, A.L. Wolf: [Achieving scalability and expressiveness in an internet-scale event notification service](#), PODC, 2001.

1.2. A. Carzaniga, M.J. Rutherford, A.L. Wolf: [A Routing Scheme for Content-Based Networking](#), INFOCOM, 2004.

1.3. A. Carzaniga, A.L. Wolf: [Forwarding in a content-based network](#), SIGCOMM, 2003.

Eireann Leverett (one of following 2 papers or combined any of them)

2.1. S. Ratnasamy, P. Francis, M. Handley, R. Karp, S. Shenker: [A scalable content addressable network](#), SIGCOMM, 2001.

2.2. S. Ratnasamy, M. Handley, R. Karp, S. Shenker: [Application-level multicast using content addressable networks](#), NGC, 2001.

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3. M. Castro, M. B. Jones, A-M. Kermarrec, A. Rowstron, M. Theimer, H. Wang and A. Wolman: [An Evaluation of Scalable Application-level Multicast Built Using Peer-to-peer overlays](#), INFOCOM, 2003.

4.1. M.J. Freedman, E. Freudenthal, D. Mazières: [Democratizing Content Publication with Coral](#), NSDI, 2004.

4.2. M.J. Freedman: [Experiences with CoralCDN: A Five-Year Operational View](#), NSDI, 2010.

2011/02/03 Session 3: Content-Centric Networking (CCN) and Named Data Networking (NDN)

Yi Liu

1. T. Koponen, M. Chawla, B. Chun, K. Kim, S. Shenker, A. Ermolinskiy, I. Stoica: [A Data-Oriented \(and Beyond\) Network Architecture](#), SIGCOMM 2007.

Karthik Nilakant

2.1. V Jacobson, D.K. Smetters, J.D. Thornton, M.F. Plass, N.H. Briggs, R.L. Braynard: [Networking Named Content](#), CoNEXT, 2009.

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2.2. L. Zhang, D. Estrin, J. Burke, V. Jacobson, J.D. Thornton, D.K. Smetters, B. Zhang, G. Tsudik, K.C. Claffy, D. Krioukov, D. Massey, C. Papadopoulos, T. Abdelzaher, L. Wang, P. Crowley, E. Yeh: [Named Data Networking \(NDN\) Project](#), PARC Technical Report NDN-0001, 2010.

Mert Coskun

3. M.J. Freedman, M. Arye, P. Gopalan, S.Y. Ko, E. Nordström, J. Rexford, D. Shue: [Service-Centric Networking with SCAFFOLD](#), Princeton University, Technical Report TR-885-10, 2010.

4. P. Jokela, A. Zahemszky, C. E. Rothenberg, S. Arianfar, and P. Nikander: [LIPSIN: Line Speed Publish/Subscribe Inter-networking](#), SIGCOMM, 2009s.

2011/02/10 Session 4: Programming in Data Centric Environment

Mert Coskun

1. Yuan Yu, Michael Isard, D. Fetterly, M. Budiu, U. Erlingsson, P.K. Gunda, J. Currey: [DryadLINQ: A System for General-Purpose Distributed Data-Parallel Computing Using a High-Level Language](#), OSDI, 2008.

2.1. Boon Thau Loo, Tyson Condie, Joseph M. Hellerstein, Petros Maniatis, Timothy Roscoe, and Ion Stoica: [Implementing Declarative Overlays](#), SOSP, 2005.

2.2. Boon Thau Loo, Tyson Condie, Minos Garofalakis, David E. Gay, Joseph M. Hellerstein, Petros Maniatis, Raghu Ramakrishnan, Timothy Roscoe, Ion Stoica: [Declarative Networking](#), Communications of the ACM, Vol. 52 No. 11, pp. 87-95, 2009.

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3. Peter Alvaro, Tyson Condie, Neil Conway, Khaled Elmeleegy, Joseph M. Hellerstein, Russell Sears: [Boom analytics: exploring data-centric, declarative programming for the cloud](#), Eurosys 2010.

4. J. Dean, S. Ghemawat: [MapReduce: Simplified Data Processing on Large Clusters](#), OSDI, 2004.

2011/02/17 Session 5: Stream Data Processing and Data/Query Model

Chen (Rocky) Ge

1. V. Gulisano, R. Jimenez-Peris, M. Patiño-Martinez, P. Valduriez: [StreamCloud: A Large Scale Data Streaming System](#), ICDCS, 2010.

Ee Lee Ng

2. Peter Pietzuch, Jonathan Ledlie, Jeffrey Shneidman, Mema Roussopoulos, Matt Welsh, and Margo Seltzer: [Network-Aware Operator Placement for Stream-Processing Systems](#), ICDE, 2006.

Shu Wan (3.2 is a longer version of 3.1)

3.1. Geoffrey Mainland, Greg Morrisett, Matt Welsh: [Flask: Staged Functional Programming for Sensor Networks](#), ICFP, 2008.

3.2. Geoffrey Mainland, Matt Welsh, Greg Morrisett: [Flask: A Language for Data-driven Sensor Network Programs](#), Harvard University Technical Report TR-13-06, 2006.

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4. S. Babu, J. Widom: [Continuous Queries over Data Streams](#), SIGMOD Record 30(3), 2001.

2011/02/24 Session 6: Network holds Data in Delay Tolerant Networks (DTN)

Karthik Nilakant

1. E. Nordström, P. Gunningberg, C. Rohner: [A Search-based Network Architecture for Mobile Devices](#), Uppsala University Technical Report 2009-003, 2009.

Wenhan Tong

2. N. Laoutaris, G. Smaragdakis, P. Rodriguez, R. Sundaram: [Delay Tolerant Bulk Data Transfers on the Internet](#), SIGMETRICS, 2009., in ACM/SIGMETRICS'09.

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3. M. Grossglauser, D. Tse: [Mobility increases the capacity of ad-hoc wireless networks](#), IEEE/ACM Trans. on Networking, 10:477–486, 2002.

4. K. Fall: [A delay-tolerant network architecture for challenged internets](#), SIGCOMM, 2003.

2011/03/03 Session 7: Network Structure/Characteristics and Contexts

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1. Kunwadee Sripanidkulchai, Bruce Maggs, Hui Zhang: [Efficient content location using interest-based locality in peer-to-peer systems](#), INFOCOM, 2003.

2.1. Dmitri Krioukov, kc claffy, Kevin Fall, Arthur Brady: [On compact routing for the internet](#), ACM 37 (3), 2007.

2.2. Dmitri Krioukov, Kevin Fall, Xiaowei Yang: [Compact routing on Internet-like graphs](#), INFOCOM, 2004.

Eireann Leverett (one of following 2 papers or combined any of them)

3.1. P. Eugster, R. Guerraoui, A-M. Kermarrec, L. Massoulié: [Epidemic information dissemination in distributed system](#), IEEE Computer, 37(5), 2004.

3.2. P. Eugster, R. Guerraoui, S.B. Handurukande, P. Kouznetsov: [Lightweight probabilistic broadcast](#), ACM TOCS 21(4), 2003.