Taejoong Chung

Postdoctoral Researcher (t.chung@neu.edu, https://taejoong.github.io)

Education

09/2009–02/2015	**Ph.D.**, Computer Science and Engineering, Seoul National University, Seoul, Korea.
	○ Thesis: "*Analytic Approach of Understanding Crowd Phenomena on the Internet: Case Studies of MMORPG and BitTorrent*"
	○ Supervisors: Prof. Yanghee Choi and Prof. Ted "Taekyoung" Kwon
03/2005–09/2009	**B.S.**, Computer Science and Enginnering, POSTECH (Pohang University of Science and Technology), Pohang, Korea.

Professional Experiences

09/2015–present	**Postdoctoral Researcher**, Northeastern University, Boston, MA, United States.
03/2015–02/2016	**Postdoctoral Researcher**, Seoul National University, Seoul, Korea.
06/2013–03/2014	**Research Intern**, Cisco Systems, Cambridge, MA, United States.
08/2011–02/2015	**Research Assistant**, Seoul National University, Seoul, Korea.
09/2010–12/2010	**Teaching Assistant**, Seoul National University, Seoul, Korea.
	○ Engineering Math II (400.002A, Fall 2010)
03/2010–06/2010	**Teaching Assistant**, Seoul National University, Seoul, Korea.
	○ Engineering Math I (400.001A, Spring 2010)

Honors and Awards

2017	Distinguished Paper Award, USENIX Security'17
2015	Microsoft Azure Research "Award Program: Microsoft Azure for Research Supports $20,000"
2010	Best Paper Award, Korea Information and Communication Society (KICS)
2010	Best Paper Award, IEEE Communication Society Seoul Chapter

Grants

2015	Personal Recommendation System and Privacy Protection through Big Data Analysis on Online Social Networks
	○ (PI) Research Grant of Basic Science Research Program by National Research Foundation of Korea (NRF) funded by the Ministry of Education (2015018668)

Refereed Conference Publications

CSCW'18	**Privacy Leakage in Event-based Social Networks: A Meetup Case Study**
	T. Chung, J. Han, D. Choi, T. Kwon, J. Rha, and H. Kim
	CSCW, Jersey City, USA, Nov. 2018
IMC'17	**Understanding the Role of Registrars in DNSSEC Deployment**
	T. Chung, R. van Rijswijk-Deij, D. Choffnes, A. Mislove, C. Wilson, D. Levin, and B. M. Maggs
	IMC, London, UK, Nov. 2017

USENIX Security'17	**A Longitudinal, End-to-End View of the DNSSEC Ecosystem** T. Chung, R. van Rijswijk-Deij, B. Chandrasekaran, D. Choffnes, D. Levin, B. M. Maggs, A. Mislove, and C. Wilson USENIX Security, Vancouver, Canada, Aug. 2017
IMC'16	**Measuring and Applying Invalid SSL Certificates: The Silent Majority** T. Chung, Y. Liu, D. Choffnes, D. Levin, B. M. Maggs, A. Mislove, and C. Wilson IMC, Santa Monica, CA, USA, Nov. 2016
IMC'16	**Tunneling for Transparency: A Large-Scale Analysis of End-to-End Violations in the Internet** T. Chung, D. Choffnes, and A. Mislove IMC, Santa Monica, CA, USA, Nov. 2016
CCS'16	**Measurement and Analysis of Private Key Sharing in the HTTPS Ecosystem** F. Cangialosi, T. Chung, D. Choffnes, D. Levin, B. M. Maggs, A. Mislove, and C. Wilson CCS, Vienna, Austria, Oct. 2016
COSN'15	**Characterizing Conversation Patterns in Reddit: From the Perspectives of Content Properties and User Participation Behaviors** D. Choi, J. Han, T. Chung, Y. Ahn, B. Chun, and T. Kwon COSN, Stanford, CA, USA, Nov. 2015
COSN'15	**Sharing Topics in Pinterest: Understanding Content Creation and Diffusion Behaviors** J. Han, D. Choi, A. Choi, T. Chung, T. Kwon, J. Rha, and C. Chuah COSN, Stanford, CA, USA, Nov. 2015
ANCS'14	**CoRC: Coordinated Routing and Caching for Named Data Networking** H. Choi, J. Yoo, T. Chung, N. Choi, T. Kwon, and Y. Choi ANCS, Marina del Rey, CA, USA, Oct. 2014
WWW'14	**Unveiling Group Characteristics in Online Social Games: A Socio-Economic Analysis** T. Chung, J. Han, D. Choi, T. Kwon, H. K. Kim and Y. Choi WWW, Seoul, Korea, Apr. 2014
IFIP Networking'13	**Spatial and Temporal Locality of Content in BitTorrent: A Measurement Study** T. Chung, J. Han, H. Lee, J. Kangasharju, T. Kwon, and Y. Choi IFIP Networking, Brooklyn, NY, USA, May 2013
SIGMETRICS'12	**Bundling Practice in Bittorrent: What, How, and Why** J. Han, S. Kim, T. Chung, T. Kwon, H. Kim, and Y. Choi SIGMETRICS, London, UK, Jun. 2012
IFIP Networking'12	**Content Publishing and Downloading Practice in BitTorrent** S. Kim, J. Han, T. Chung, T. Kwon, H. Kim, and Y. Choi IFIP Networking, Prague, Czech, May 2012
GLOBECOM'12	**Bandwidth Allocation for BitTorrent under Multi-Torrent Environments** J. Choi, J. Han, T. Chung, E. Cho, T. Kwon, and Y. Choi GLOBECOM, Houston, Texas, United States, Dec. 2011

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Journal Publications

An End-to-End View of DNSSEC Ecosystem Management
T. Chung, R. van Rijswijk-Deij, B. Chandrasekaran, D. Choffnes, D. Levin, B. M. Maggs, A. Mislove, and C. Wilson
USENIX Magazine ;login:, Vol. 42, No. 4, Dec. 2017

A Target-centric Surveillance System based on Localization and Social Networking
J. Han, N. Choi, T. Chung, T. Kwon, and Y. Choi
Multimedia Tools and Applications (MTAP), Vol. 73, Issue 1, pp. 241-265, Nov. 2014

Strategic Bundling for Content Availability and Fast Distribution in BitTorrent

J. Han, T. Chung, S. Kim, H. Kim, J. Kangasharju, T. Kwon, and Y. Choi

Computer Communication (COMCOM), Vol. 43, pp. 64-73, May 2014

Bundling Practice in Bittorrent: What, How, and Why

J. Han, S. Kim, T. Chung, T. Kwon, H. Kim, and Y. Choi

ACM SIGMETRICS Performance Evaluation Review, Vol. 40, No. 1, pp. 77-88, Jun. 2012.

How Prevalent is Content Bundling in BitTorrent?

J. Han, T. Chung, S. Kim, T. Kwon, H. Kim, and Y. Choi

ACM SIGMETRICS Performance Evaluation Review, Vol. 39, No. 1, pp. 319-320, Jun. 2011.

Posters

SIGCOMM'17   **The Root Canary: Monitoring and Measuring the DNSSEC Root Key Rollover**

R. van Rijswijk-Deij, T. Chung, D. Choffnes, A. Mislove, and W. Toorop

SIGCOMM, Los Angeles, CA, USA, Aug. 2017

ACNS'14   **Toward Terabyte-scale Caching with SSD in a Named Data Networking Router**

W. So, T. Chung, H. Yuan, D. Oran, and M. Stapp

ANCS, Marina del Rey, CA, USA, Oct. 2014

PAM'13   **Spatial and Temporal Locality of Swarm Dynamics in BitTorrent**

T. Chung, J. Han, H. Lee, J. Kangasharju, T. Kwon, and Y. Choi

PAM, Hong Kong, March. 2013.

Non-Refereed Conference Publications

TPRC'17   **Investigating End-To-End Integrity Violations in Internet Traffic**

A. Mislove, D. Choffnes, and T. Chung

TPRC, Arlington, VA, USA, Sept. 2017

Fellowships

2012–2016   **Samsung Ph.D. Industrial Scholarship**.

2010–2012   **Hyundai (Hajung) Scholarship**.

Summer 2007   **POSTECH Student Exchange Program to UCLA**.

2005–2008   **National Science & Technology Scholarship, KOSAF(Korea Student Aid Foundation)**.

Project Experience

06/2015–06/2016   **Personal Recommendation System and Privacy Protection through Big Data Analysis on Online Social Networks**

National Research Foundation of Korea (NRF)

09/2012–06/2013   **Networking Content Delivery Optimization**

SAMSUNG Electronics

03/2011–02/2014   **Fundamental Research on In-network Caching and Routing for Named-data Networking**

Korea Communications Agency (KCA)

07/2010–12/2012   **Future Internet Service Demonstration: Internet Video Diary**

Korea Internet & Security Agency (KISA), Korea

Service

Program Committee Member.

'14 Poster Selection Committee of ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS)

'17 Program Committee of International AAAI Conference on Web and Social Media (ICWSM)

'17 Program Committee of IEEE International Conference on Ubiquitous Computing and Communications (IUCC)

'18 Program Committee of International AAAI Conference on Web and Social Media (ICWSM)
   Shadow Program Committee Member.

'17 ACM Internet Measurement Conference (IMC)

Talks

11/02/2017 ACM Internet Measurement Conference (IMC)

09/29/2017 New England Security Day (NESD)

09/08/2017 Research Conference on Communications, Information and Internet Policy (TPRC)

08/18/2017 USENIX Security

11/16/2016 ACM Internet Measurement Conference (IMC)

11/15/2016 ACM Internet Measurement Conference (IMC)

10/07/2016 New England Networking and Systems Day (NENS)

12/29/2014 Korea Advanced Institute of Science and Technology (KAIST)

04/10/2014 World Wide Web Conference (WWW)

05/22/2013 IFIP Networking

12/07/2011 IEEE GLOBECOM

References

Alan Mislove (amislove@ccs.neu.edu)
Associate Professor of Computer Science, Northeastern University, USA

Bruce M. Maggs (bmm@cs.cmu.edu)
Professor of Computer Science, Duke University and Vice President of Research, Akamai Technologies, USA

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Assistant Professor of Computer Science, University of Maryland, USA

David Choffnes (choffnes@ccs.neu.edu)
Assistant Professor of Computer Science, Northeastern University, USA

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Former fellow at Cisco Systems, USA

Ted "Taekyoung" Kwon (tkkwon@snu.ac.kr)
Professor, School of Computer Science & Engineering, Seoul National University