Hyun-chul Kim   *Curriculum vitae*

CONTACT
INFORMATION

Dept. of Software
Sangmyung University
31, Sangmyung Univ. Road, Dongnam-gu
Cheonan, South Korea (ZIP code: 31066)

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RESEARCH
INTERESTS

DNA (Data, Network, and AI); Network Data and System Science & Engineering; Quantifying and leveraging real implications and contributions (as well as debunking myths) of AI algorithms on the Internet-scale system science & engineering; Collective behavior and distinguishing patterns of human beings and software systems, including AI; Revealing, explaining, and leveraging human factors, social/socio-economic factors, and man-made artificial factors in man-machine symbiotic systems; Challenges and opportunities with AI-enabled systems and digital financial services (crowdfunding, ICO, and Microfinance).

EDUCATION

KAIST, Daejeon, South Korea
    Ph.D., Computer Science, February 2005 (Adviser: Prof. Kilnam Chon)
    M.S., Computer Science (Adviser: Prof. Kilnam Chon)
    B.S., Computer Science

WORK
EXPERIENCE

Sangmyung University, Cheonan, South Korea
    Associate Professor at Software   **March 2018 to present**
    Assistant Professor at CSE   **March 2012 to February 2018**

Seoul National University, Seoul, South Korea
    BK Assistant Professor at CSE   **March 2008 to Febrary 2012**

Center for Applied Internet Data Analysis (CAIDA), UC San Diego, CA
    Postdoctoral Visiting Scholar   **January 2006 to December 2007**

KAIST, Daejeon, South Korea
    Postdoctoral Researcher   **March 2005 to December 2005**

CONFERENCE
PUBLICATIONS

1*. *[1] Kang-hee Lee, Seung-hun Lee, and Hyun-chul Kim. Traffic Classification using Deep Learning: Being Highly Accurate is Not Enough. In *ACM SIGCOMM*, Aug. 2020. (2 pg. poster)

2*. Akmal Khan, Hyun-chul Kim, and Ted "Taekyoung" Kown. AS Relationships Inference from the Internet Routing Registries. In *ACM SIGCOMM*, Aug. 2020. (2 pg. poster)

3. Taejoong Chung, Jinyoung Han, Daejin Choi, Ted "Taekyoung"' Kwon, Jong-youn Rha, and Hyun-chul Kim. Privacy Leakage in Event-based Social Networks: A Meetup Case Study. In *Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, Nov. 2018. (acceptance ratio = 27.3%)

4*. Seunghun Lee, Kanghee Lee, and Hyun-chul Kim. Content-based Success Prediction of Crowdfunding Campaigns: A Deep Learning Approach. In *Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)*, Nov. 2018. (4 pg. poster)

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[1] "*": as a (co-)corresponding or contact author.

5*. Wafa Shafqat, Seughun Lee, and Hyun-chul Kim. The Language of Deceivers: Linguistic Features of Crowdfunding Scams. In *Proceedings of the WWW*, Apr. 2016. (2 pg. poster)

6. Jinyoung Han, Daejin Choi, Byung-Gon Chun, Ted "Taekyoung"' Kwon, Hyun-chul Kim, and Yanghee Choi. Collecting, Organizing, and Sharing Pins in Pinterest: Interest-driven or Social-Driven? In *Proceedings of the ACM SIGMETRICS*, Jun. 2014. (acceptance ratio = 16.8%)

7*. Akmal Khan, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. AS-level Topology Collection through Looking Glass Servers. In *Proceedings of the ACM Internet Measurement Conference, co-sponsored by ACM SIGCOMM and SIGMETRICS and in cooperation with USENIX*, Oct. 2013. (short paper, accepance ratio = 19.8% (overall short+long paper acceptance ratio = 23.6%))

8. Algenlos Marnerides, Dimitrios Pezaros, Hyun-chul kim, and David Hutchison. Internet Traffic Classification using Energy Time-Frequency Distributions. In *Proceedings of the IEEE International Conference on Communications (ICC)*, Jun. 2013.

9*. Jinyoung Han, Seungbae Kim, Taejoong Chung, Ted "Taekyoung"' Kwon, Hyun-chul Kim, and Yanghee Choi. Bundling Practice in Bittorrent: What, How, and Why. In *Proceedings of the ACM SIGMETRICS*, Jun. 2012. (acceptance ratio = 15.3%)

10. Seungbae Kim, Jinyoung Han, Taejoong Chung, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. Content Publishing and Downloading Practice in BitTorrent. In *Proceedings of the IFIP NETWORKING*, May. 2012.

11. Alberto Dainotti, Antonio Pescape, and Hyun-chul Kim. Traffic Classification through Joint Distributions of Packet-level Statistics. In *Proceedings of the IEEE Global Communications Conference (GLOBECOM)*, Dec. 2011.

12*. Kyungmoon Woo, Hyukmin Kwon, Hyun-chul Kim, Chong-kwon Kim, and Huy Kang Kim. What Can Free Money Tell Us on the Virtual Black Market? In *Proceedings of the ACM SIGCOMM*, Aug. 2011. (2pg. extended abstract)

13*. Seokshin Son, Ah Reum Kang, Hyun-chul Kim, Ted "Taekyoung" Kwon, Juyong Park, and Huy Kang Kim. Multi-relational Social Networks in a Large-scale MMORPG. In *Proceedings of the ACM SIGCOMM*, Aug. 2011. (2pg. extended abstract)

14*. Jinyoung Han, Taejoong Chung, Seungbae Kim, Ted "Taekyoung" Kwon, Hyun-chul Kim, and Yanghee Choi. How Prevalent is Content Bundling in BitTorrent? In *Proceedings of the ACM SIGMETRICS*, Jun. 2011. (2pg. extended abstract)

15*. Xiaofei Wang, Seungbae Kim, Ted "Taekyoung" Kwon, Hyun-chul Kim, and Yanghee Choi. Unveiling the BitTorrent Performance via the Mobile WiMAX Networks. In *Proceedings of the Passive and Active Measurement Conference (PAM)*, Mar. 2011.

16*. Yeon-sup Lim, Hyun-chul Kim, Jiwoong Jeong, Chong-kwon Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Internet Traffic Classification Demystified: On the Three Sources of the Discriminative Power. In *Proceedings of the ACM SIGCOMM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*, Dec. 2010.

17*. Seungbae Kim, Xiaofei Wang, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Measurement and Analysis of BitTorrent Traffic in Mobile WiMAX Networks. In *Proceedings of the IEEE Conference on Peer-to-Peer Computing*, Aug. 2010. (4pg. short paper)

18*. Akmal Khan, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Public Internet Routing Registries (IRR) Evolution. In *Proceedings of the International Conference on Future Internet Technologies (CFI), in cooperation with ACM*, Jun. 2010.

19. Diko Ko, Kideok Cho, Munyoung Lee, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Decentralized and Autonomous Content Overlay Networking (DA-CON) with WiFi Access Points. In *Proceedings of the International Conference on Future Internet Technologies (CFI), in cooperation with ACM*, Jun. 2010.

20*. Sylvain Hilaire, Hyun-chul Kim, Chong-kwon Kim. How to deal with bot scum in MMORPGs? In *Proceedings of the IEEE Communications Quality and Reliability (CQR) Workshop*, Jun. 2010.

21*. Jinyoung Han, Taejoong Chung, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Systematic Support for Content Bundling in BitTorrent Swarming. In *Proceedings of the IEEE Conference on Computer Communications (INFOCOM) Student Workshop*, Mar. 2010. (2pg. extended abstract)

22*. Xiaofei Wang, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Measurement and Analysis of World of Warcraft in Mobile WiMAX Networks. In *Proceedings of the ACM/IEEE International Workshop on Network and Systems Support for Games (NetGames)*, Nov. 2009.

23. Jaeyoung Choi, Jinyoung Han, Eunsang Cho, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Performance Comparison of Content-Oriented Networking Alternatives: A Tree versus a Distributed Hash Table. In *Proceedings of the IEEE Conference on Local Computer Networks (LCN)*, Oct. 2009.

24. Akmal Khan, Ted "Taekyoung"' Kwon, and Hyun-chul Kim. Probabilistic IP Prefix Authentication (PIPA) for Prefix Hijacking In *Proceedings of the International Conference on Future Internet Technologies (CFI), in cooperation with ACM*, Jun. 2009.

25. Marios Iliofotou, Hyun-chul Kim, Michalis Faloutsos, Michael Mitzenmacher, Prashanth Pappu, and George Varghese. Graph-based P2P Traffic Classification at the Internet Backbone. In *Proceedings of the IEEE INFOCOM Workshop on Global Internet*, Apr. 2009.

26. Angelos K. Marnerides, Dimitrios P. Pezaros, Hyun-chul Kim, and David Hutchison. Unsupervised Two-Class Multi-Class Support Vector Machines for Abnormal Traffic Characterization. In *Proceedings of the Passive and Active Measurement Conference (PAM) Student Workshop*, Apr. 2009.

27. Xiaofei Wang, Hua Cai, Hyun-chul Kim, Taekyoung Kwon, Yanghee Choi, Sunghyun Choi. Can We Enjoy Internet Online Game accessed via the WiBro/IEEE802.16e Network? In *Proceedings of the Passive and Active Measurement Conference (PAM) Student Workshop*, Apr. 2009.

28. Hyun-chul Kim, kc claffy, Marina Fomenkov, Dhiman Barman, Michalis Faloutsos, and KiYoung Lee. Internet Traffic Classification Demystified: Myths, Caveats, and the Best Practices. In *Proceedings of the ACM SIGCOMM Conference on emerging Networking EXperiments and Technologies (CoNEXT)*, Dec. 2008.

29. Hyun-chul Kim, Marina Fomenkov, Nevil Brownlee, kc claffy, Dhiman Barman, and Michalis Faloutsos. Comparison of Internet Traffic Classification Tools. In *Proceedings of the Internet Research Task Force (IRTF) Internet Measurement Research Group (IMRG) Workshop on Application Classification and Identification (WACI)*, Oct. 2007.

30. Hyungjune Yim, Hyun-chul Kim, and Kilnam Chon. Multimedia traffic load distribution in Massively Multiplayer Online Games. In *Proceedings of the International Conference on Information Networking (ICOIN)*, Jan. 2006.

31. Hyun-chul Kim, Dongman Lee, Joonbok Lee, Jay Jungwon Suh, and Kilnam Chon. A Measurement Study of Storage Resource and Multimedia Contents on a High Performance Research and Education Network. In *Proceedings of the IEEE International Conference on High Speed Networks and Multimedia Communications (HSNMC)*, Jul. 2003.

32. Joonbok Lee, Hyun-chul Kim, and Kilnam Chon. A Peer-to-peer supported Cache System for FTP. In *Proceedings of the Advanced Network Conference*, Aug. 2003.

33. Hong-kee Sul, Hyun-chul Kim, and Kilnam Chon. A Hybrid Pagoda Broadcasting Protocol: Fixed-Delay Pagoda Broadcasting Protocol with Partial Preloading. In *Proceedings of the IEEE International Conference on Multimedia and Expo*, Jul. 2003.

34. Hyun-chul Kim and Kilnam Chon. Update Policies for Network Caches. In *Proceedings of the International WebNet Conference on the WWW and Internet*, Nov. 1998.

35. Ji-eun Lee, Hyun-chul Kim, Hyojung Hwang, Youngmin Jin, and Kilnam Chon. Report on the costs and benefits of cache hierarchy in Korea. In *Proceedings of the International WWW Caching Workshop*, Jun. 1998.

JOURNAL
PUBLICATIONS

1*. Jinyoung Han, Daejin Choi, Taejoong Chung, Chen-Nee Chuah, Hyun-chul Kim, and Ted "Taekyoung"' Kwon. Predicting content consumption from content-to-content relationships In *Journal of Network and Computer Appliocations*, vol. 132, Apr. 2019. (SCI, IF in 2017 = 3.991, for 5 years = 3.853)

2. Taejoong Chung, Jinyoung Han, Daejin Choi, Ted "Taekyoung"' Kwon, Jong-youn Rha, and Hyun-chul Kim. Privacy Leakage in Event-based Social Networks: A Meetup Case Study In *Proceedings of the ACM on Human-Computer Interaction*, vol. 1, Issue CSCW, Article No. 35, Nov. 2017. (also appears in Proceedings of the ACM CSCW 2018, acceptance ratio = 27.3%)

3*. Xiaofei Wang, Min Chen, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. Measurement and Analysis of Online Gaming Services on Mobile WiMAX Networks. *Wireless Communications and Mobile Computing (WCMC)*, vol. 15, no. 7, May 2015. (SCI, IF in 2012 = 0.863, for 5 years = 1.137)

4*. Jinyoung Han, Daejin Choi, Byung-Gon Chun, Ted "Taekyoung"' Kwon, Hyun-chul Kim, and Yanghee Choi. Collecting, Organizing, and Sharing Pins in Pinterest: Interest-driven or Social-Driven? *ACM SIGMETRICS Performance Evaluation Review*, vol. 42, no. 1, Jun. 2014. (Proceedings of ACM SIGMETRICS 2014)

5*. Jinyoung Han, Seungbae Kim, Taejoong Chung, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. Strategic Bundling for Content Availability and Fast Distribution in BitTorrent. *Computer Communications*, vol. 43, pp. 64-73, May 2014. (SCI, IF in 2012 = 1.079, for 5 years = 1.227)

6*. Akmal Khan, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. A Comparative Study on IP Prefixes and their Origin ASes in BGP and the IRR. *ACM SIGCOMM Computer Communication Review*, vol. 43, no. 3, Jul. 2013. (acceptance ratio <= 15% according to http://ccr.sigcomm.org. SCIE, IF in 2010 = 1.056, for 5 years = 1.438)

7*. Jinyoung Han, Seungbae Kim, Taejoong Chung, Ted "Taekyoung"' Kwon, Hyun-chul Kim, and Yanghee Choi. Bundling Practice in Bittorrent: What, How, and Why. In *ACM SIGMETRICS Performance Evaluation Review*, vol. 40, no. 1, Jun. 2012. (SCOPUS, SNIP in 2010 = 1.835, Proceedings of ACM SIGMETRICS 2012)

8. Seungbae Kim, Jinyoung Han, Taejoong Chung, Hyun-chul Kim, Ted "Taekyoung"' Kwon, and Yanghee Choi. Content Publishing and Downloading Practice in BitTorrent. In *Lecture Notes in Computer Science*, to appear, May 2012. (SCOPUS, SNIP in 2010 = 0.648, Proceedings of IFIP NETWORKING 2012)

9. Seokshin Son, Ah Reum Kang, Hyun-chul Kim, Ted "Taekyoung" Kwon, Juyong Park, and Huy Kang Kim. Analysis of Context Dependence in Social Interaction Networks of a Massively Multiplayer Online Role-Playing Game In *PLoS (Public Library of Science) ONE*, vol. 7, no. 4, Apr. 2012. (SCI, IF in 2010 = 4.411)

10*. Kyungmoon Woo, Hyukmin Kwon, Hyun-chul Kim, Chong-kwon Kim, and Huy Kang Kim. What Can Free Money Tell Us on the Virtual Black Market? In *ACM SIG-COMM Computer Communiction Review*, vol. 41, no. 4, Oct. 2011. (SCIE, IF in 2010 = 1.056, for 5 years = 1.438, Proceedings of ACM SIGCOMM 2011, Poster)

11*. Seokshin Son, Ah Reum Kang, Hyun-chul Kim, Ted "Taekyoung" Kwon, Juyong Park, and Huy Kang Kim. Multi-relational Social Networks in a Large-scale MMORPG. In *ACM SIGCOMM Computer Communication Review*, vol. 41, no. 4, Oct. 2011. (SCIE, IF in 2010 = 1.056, for 5 years = 1.438, Proceedings of ACM SIGCOMM 2011, Poster)

12. Yongmin Choi, Hyun Wook Ji, Jae-yoon Park, Hyun-chul Kim, and John A. Silvester. A 3W Network Strategy for Mobile Data Traffic Offloading. *IEEE Communications*, vol. 41, no. 10, Oct 2011. (SCI, IF in 2010 = 2.837, for 5 Years = 3.043)

13*. Jinyoung Han, Taejoong Chung, Seungbae Kim, Ted "Taekyoung" Kwon, Hyun-chul Kim, and Yanghee Choi. How Prevalent is Content Bundling in BitTorrent? *ACM SIGMETRICS Performance Evaluation Review*, vol. 39, no. 1, Jun. 2011. (SCOPUS, SNIP in 2010 = 1.835, Proceedings of ACM SIGMETRICS 2011, Poster)

14. Marios Iliofotou, Hyun-chul Kim, Michalis Faloutsos, Michael Mitzenmacher, Prashanth Pappu, and George Varghese. Graption: Graph-based P2P Traffic Classification Framework for the Internet Backbone. *Computer Networks*, vol. 55, no. 8, Jun. 2011. (SCIE, IF in 2010 = 1.176, for 5 years = 1.690)

15. Yongmin Choi, John A. Silvester, and Hyun-chul Kim. Analysis and Modeling of Multi-media Workload Characteristics in a Multi-service IP Network. *IEEE Internet Computing*, vol. 15, no. 2, Mar. 2011. (SCI, IF in 2010 = 2.514, for 5 years = 2.467)

16*. Xiaofei Wang, Seungbae Kim, Ted "Taekyoung" Kwon, Hyun-chul Kim, and Yanghee Choi. Unveiling the BitTorrent Performance via the Mobile WiMAX Networks. In *Lecture Notes in Computer Science*, vol. 6579, Mar. 2011. (SCOPUS, SNIP in 2010 = 0.648, Proceedings of PAM 2011)

17*. Suchul Lee, Hyun-chul Kim, Dhiman Barman, Sungryoul Lee, Chong-kwon Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. NeTraMark: A Network Traffic Classification Benchmark. *ACM SIGCOMM Computer Communication Review*, vol. 41, no. 1, Jan. 2011. (SCIE, IF in 2010 = 1.056, for 5 years = 1.438)

18. Hyun-chul Kim, Dongman Lee, Kilnam Chon, Beakcheol Jang, Ted "Taekyoung" Kwon, and Yanghee Choi. Performance Impact of Large File Transfer on Web Proxy Caching: A Case Study in a High Performance Network Environment. *Journal of Communications and Networks*, vol. 12, no. 1, Feb. 2010. (SCI, IF in 2010 = 0.351, for 5 years = 0.354)

19. Beakcheol Jang, Dongman Lee, Kilnam Chon, and Hyun-chul Kim. DNS Resolution with Renewal Using Piggyback. *Journal of Communications and Networks*, vol. 11, no. 4, Aug. 2009. (SCI, IF in 2010 = 0.351, for 5 years = 0.354)

20. Hyungjune Yim, Hyun-chul Kim, and Kilnam Chon. Multimedia traffic load distribution in Massively Multiplayer Online Games. In *Lecture Notes in Computer Science*, vol. 3961, Jan. 2006. (Proceedings of ICOIN 2006)

21. Don Gilbert, Yoshihiro Ugawa, Markus Buchhorn, Tan Tin Wee, Akira Mizushima, Hyun-chul Kim, Kilnam Chon, Seyeon Weon, Juncai Ma, Der-Ming Liou, Somnuk Keretho, and Suhaimi Napis. Bio-Mirror project for public bio-data distribution. *BioInformatics*, vol. 20, no. 17, Nov. 2004. (SCI, IF in 2010 = 4.877, for 5 years = 6.325)

GRANTS

1*. Profiling Cyber Security Experts, $40 K, sponsored by National Security Research Institute, Korea, PI, 2020.06.01-11.31.

2*. DeepScanning: AI-based Automated Software Scanning, $30 K, an Industry-Academic Cooperation/Collaboration sub-project, National Program of Excellence in Software, sponsored by Ministry of Science and ICT, Korea, PI, 2020.04.01-2020.12.31.

3*. Towards a Healthy Digital Financial Investment Ecosystem using Multi-modal Data-driven Explanations, $100 K/year, the Mid-Career Science Research Program through the National Research Foundation of Korea (NRF), Ministry of Science and ICT, PI, 2019.09.01-2022.02.28.

4*. Towards Explainable AI in Next-Generation Intrusion Detection System, $60 K, sponsored by National Security Research Institute, Korea, PI, 2019.04.01-10.31.

5*. Statistics-based Network Behavior Modeling, $40 K, sponsored by National Security Research Institute, Korea, PI, 2018.05.01-10.31.

6*. Traffic Measurement in Anonymity Networks, $35 K, sponsored by National Security Research Institute, Korea, PI, 2017.04.01-10.31.

7*. Characterization and Automatic Labeling of Malicious Traffic in Control System Networks, $30 K, sponsored by National Security Research Institute, Korea, PI, 2017.04.01-10.31.

8*. Development of Side Awning Tents using Environmentally-aware and DTP (Digital Textile Printing) Technologies, $100 K, sponsored by The Small and Medium Business Administration, Korea, 2016.12.01-2017.11.30.

9*. Towards Social Context-aware Information-Centric Networking: phase 2 (granted 3 additional years of funding, after its phase 1), $150 K, the Basic Science Research Program through the National Research Foundataion of Korea (NRF), Ministry of Education, PI, 2016.11.01-2019.10.31.

10*. Network Traffic Classification for Intrusion Detection, $33 K, sponsored by National Security Research Institute, Korea, PI, 2015.6.16-12.15.

11*. Towards Social Context-aware Information-Centric Networking: phase 1, $150 K, the Basic Science Research Program through the National Research Foundataion of Korea (NRF), Ministry of Education, PI, 2013.06.01-2016.05.31.

12*. On e-Science based Future Internet Infrastructure and Technologies, $30 K, Korea Institute of Science and Technology Information (KISTI), PI, 2009.11.10-2010.7.31.

13*. On a Ubiquitous Contents Service in the Future Internet, \$40 K, National Information Society Agency (NIA), PI, 2008.7.1-2008.11.30.

14. Development of Future Internet Model (DEFINE), \$4 M, National Institute for Mathematical Sciences (NIMS), PI of a unit research project (Internet data and social network analysis), 2008.12.1-2014.12.31.

15. Next Generation Network Services research (CENNS), \$3.4 M, National IT Industry Promotion Agency (NIPA), PI of a unit research project (Internet traffic classification), 2008.6.1-2011.12.31.

AWARDS AND FELLOWSHIPS

1. LG Yeonam Cultural Foundation's Overseas Research Professor Fellowship (\$40K), Sep. 2021-Aug. 2022.

1. Best Teaching Award (1st), School of Engineering, Sangmyung University, Fall 2013.

2. Best Teaching Award (3rd), School of Engineering, Sangmyung University, Spring 2013.

3. Best Teaching Award (2nd), School of Engineering, Sangmyung University, Fall 2012.

4. Best paper award from Korea Information and Communication Society. Taejoong Chung, Jinyoung Han, Hyun-chul Kim, Taekyoung Kwon, and Yanghee Choi. Analysis on Availability Metrics in BitTorrent Swarming System. In *Proceedings of Korea Information and Communication Society (KICS) Summer Conference*, Jul. 2010.

5. Best paper award from IEEE Communication Society Seoul Chapter. Taejoong Chung, Jinyoung Han, Hyun-chul Kim, Taekyoung Kwon, and Yanghee Choi. Analysis on BitTorrent Performance Based on the Number of Unchoked Peers. In *Proceedings of Joint Conference on Communication and Information (JCCI)*, Apr. 2010.

6. Postdoctoral research fellowship, supported by National Information and Telecommunication Scholarship Program, Ministry of Information and Communication, South Korea, Jan. 2006 - Dec. 2007.

PROFESSIONAL SERVICE

1. Publicity Co-chair, ACM CoNEXT 2018.

2. Program Co-chair, ACM CoNEXT 2011 Student Workshop; Asia Future Internet 2010 Summer School; Internet2-Asia Pacific Advanced Network (APAN) Joint Workshop on P2P and Grid: Convergence and Challenges 2004; Asia-Pacific Student Entrepreneurship Society (ASES) Workshop 2001; APAN Web Caching Workshop 1998.

3. Organization Committee member, ACM CoNEXT 2011, ACM CoNEXT 2018.

4. Technical Program Committee member, ACM Symposium on Applied Computing, Social Network and Media Analysis Track (SONAMA) 2016-2020, ACM SIG-COMM Workshop on Big Data Analytics and Machine Learning for Data Communication Networks (Big-DAMA) 2017-2019, IFIP Networking 2013-2019, International Conference on Computing, Networking and Communications (ICNC) 2014-2019, IEEE ICC Workshop on Traffic Identification and Classification for Advanced Network Services and Scenarios (TRICANS) 2013/2014, Asian Internet Engineering Conference (AINTEC) 2006/2013/2014, IEEE MASCOTS 2013, International Workshop on Traffic Monitoring and Analysis (TMA) 2012/2013, Global Future Internet Week (GFIW) 2011, Asia-Pacific Network Operations and Management

Symposium (APNOMS) 2008/2009/2011/2012, IEEE/IFIP Workshop on End-to-End Monitoring Techniques and Services (E2EMon) 2007/2008, Africa-Asia Forum on Network Research and Engineering (AAF) 2008/2009/2010.

4. Reviewer, Physica A: Statistical Mechanics and Its Applications, IEEE Transactions on Neural Networks, IEEE Transactions on Multimedia, IEEE Transactions on Networking, ACM SIGCOMM Computer Communication Review, European Transactions on Telecommunications, Journal of Systems and Software, IEEE International Conference on Communications (ICC, 2004, 2011), Computer Networks, Computer Communications, IEEE Communications Letters, International Journal of Network Management, Journal of Communications and Networks (2008-2010), etc.

5. Local Arrangement Chair, Asia Future Internet Winter Camp 2010.

DOMESTIC
JOURNAL
PUBLICATIONS

1*. Yeon-su Lee and and Hyun-chul Kim. A Deep-Learning based violent protest detection system. *Journal of the Korea Society of Computer and Information*, vol. 24, no. 3, pp. 87-93, Mar. 2019.

2*. Kang-hee Lee, Seung-hun Lee, and Hyun-chul Kim. Predicting Success of Crowdfunding Campaigns using Multimedia and Linguistics Features. *Journal of Korea Multimedia Society*, vol. 21, no. 2, pp. 281-288, Feb. 2018.

3*. Seung-hun Lee and Hyun-chul Kim. Crowdfunding Scams: The Profiles and Language of Deceivers. *Journal of the Korea Society of Computer and Information*, vol. 23, no. 3, pp. 55-62, Mar. 2018.

4*. Jangho Yoon, Seung-hun Lee and Hyun-chul Kim. Smart SNS Map: Location-based SNS Data Mapping and Visualization System. *Journal of the Korea Multimedia Society*, vol. 19, no. 2, pp. 428-435, Feb. 2016.

5. Taejoong Chung, Jinyoung Han, Ted "Taekyoung" Kwon, and Yanghee Choi. An Analysis on BitTorrent Performance Based on the Number of Unchoked Peers. *Journal of Korea Information and Communication Society (KICS)*, vol. 35, no. 8, Aug. 2010. (Korea Citation Index (KCI), forward from JCCI 2010 Conference, winning the best paper award from Korea Information and Communication Society.)

DOMESTIC
CONFERENCE
PUBLICATIONS

1. Seung-hun Lee, Daeyoung Oh, Minhyuk Kang and Hyun-chul Kim. SNS Map: Location-based SNS Data Mapping System. *Proceedings of the Korea Computer Congress (KCC)*, Jeju, Korea, Jun. 2015.

2. Taejoong Chung, Jinyoung Han, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Analysis on Availability Metrics in BitTorrent Swarming System. In *Proceedings of Korea Information and Communication Society (KICS) Summer Conference*, Jul. 2010. (Best Paper Award from Korea Information and Communication Society)

3*. Seungbae Kim, Xiaofei Wang, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Performance Evaluation of BitTorrent over WiBro Network. In *Proceedings of Korea Computer Congress (KCC)*, Jun. 2010.

4. Taejoong Chung, Jinyoung Han, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Analysis on BitTorrent Performance Based on the Number of Unchoked Peers. In *Proceedings of Joint Conference on Communication and Information (JCCI)*, Apr. 2010. (Best Paper Award from IEEE Communication Society Seoul Chapter.)

5*. Seungbae Kim, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Application Traffic Classification at End Host Level. In *Proceedings of Korea Information and Communication Society (KICS) Fall Conference*, Nov. 2009.

6. Akmal Khan, Hyun-chul Kim, Ted "Taekyoung" Kwon, and Yanghee Choi. Accessing Web Services Anonymously using P2P. In *Proceedings of Korea Information and Communication Society (KICS) Fall Conference*, Nov. 2009.

DEMO

1*. Suchul Lee, Sungryoul Lee, Hyun-chul Kim, Chong-kwon Kim, Dhiman Barman, Ted "Taekyoung" Kwon, and Yanghee Choi. NeTraMark: A Network Traffic Classification Benchmark. In *IEEE Conference on Computer Communications (INFOCOM)*, Mar. 2010.

PATENTS

1. Suchul Lee, Sungryoul Lee, Hyun-chul Kim, and Chong-kwon Kim. Apparatus for Network Traffic Classification Benchmark. *US Patent no. 8631331*, Jan. 14, 2014.

2. Suchul Lee, Sungryoul Lee, Hyun-chul Kim, and Chong-kwon Kim. Internet Traffic Classification Benchmarking Framework. *Korea Patent, Resigtration no. 06-2010-0965452*, Jun. 15, 2010.

TEACHING
EXPERIENCE

Instructor for Advanced Neural Networks, Introduction to Big Data Science, Introduction to Web Data Mining, Mining of Massive Datasets, Analysis of Online Social Networks, Network Science, Algorithms, Computer Networking, Data Structure, Creative Engineering Design, C Programming, Discrete Mathematics, Automata, Linear Algebra, System Programming, Software Project, Capstone Design, Convergence of Information and Communication Technologies, Advanced Data Communications, Computer Programming, and Introduction to Computer Science and Engineering