

Curriculum Vitae

Name: Hyoungshick Kim

Gender: Male

Citizenship: South Korea

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Status:

- **Assistant Professor** in Department of Computer Science and Engineering, College of Information and Communication Engineering, Sungkyunkwan University

Education:

- **Ph.D.** Computer Laboratory, University of Cambridge, UK, 2008.10-2011.12.
Supervisor: Prof. Ross Anderson
Thesis: Complex network analysis for secure and robust communications (Examiners – Prof. Jon Crowcroft and Prof. Alessandro Acquisti)
- **M.S.** Division of Computer Science, KAIST, Korea, 1999.3-2001.2.
Supervisor: Prof. Kyung-Yong Chwa
Thesis: A Distributed Algorithm for Maintaining a Minimum Spanning Tree in Dynamic Network
- **B.S.** Department of Information Engineering, Sungkyunkwan University, Korea, 1995.3-1999.2.
Supervisor: Prof. Youngik Eom
Thesis: Distributed Mutual Exclusion Algorithm for Maintaining Tree-Height Balance in Mobile Computing Environments

Experience:

- **2013.3-present: Department of Computer Science and Engineering, College of Information and Communication Engineering, Sungkyunkwan University, Korea**
Assistant Professor – Security Engineering Laboratory
- **2012.3-2013.2: Department of Electrical and Computer Engineering, University of British Columbia, Canada**
Postdoctoral Fellow – Laboratory for Education and Research in Secure Systems Engineering
- **2012.1-2012.3: Computer Laboratory, University of Cambridge, UK**
Research intern – System Research Group

- **2008.10-2011.12: Computer Laboratory, University of Cambridge, UK**
PhD candidate – Security Group
- **2009: Terrogence Ltd., UK**
Part time – Data collection and translation about North Korea
- **2008.1-2008.9: Digital Media R&D Center, Samsung Electronics, Korea**
Senior Engineer – Core S/W Component Laboratories
- **2004.6-2007.12: Software Laboratories, Samsung Electronics, Korea**
Engineer(2004-2006)/Senior Engineer(2007) – Home Software Platform Team
- **1999.3-2004.5: Division of Computer Science, KAIST, Korea**
Research Assistant – Theory of Computation Laboratory

Teaching Experience:

- Lecturer: Security Engineering, Department of Computer Science and Engineering, Sungkyunkwan University, Spring 2016. Graduate level course for understanding of computer security technology.
- Lecturer: Basic Programming Languages, Department of Computer Science and Engineering, Sungkyunkwan University, Spring 2015 – 2016. Undergraduate level course for understanding of basic programming skills.
- Lecturer: Database Security, Department of Financial Security, Yonsei University, Spring 2015 – 2016. Graduate level course for understanding of computer security technology.
- Lecturer: Basis and Practice in Programming, Department of Software, Sungkyunkwan University, Spring 2015. Undergraduate level course for understanding of basic programming skills.
- Lecturer: Data Structures, Department of Computer Science and Engineering & Department of Software, Sungkyunkwan University, Fall 2014 – 2016. Undergraduate level course for understanding of data structures and basic algorithms.
- Lecturer: Information System Security, Department of Computer Science and Engineering, Sungkyunkwan University, Spring 2013 – 2015. Graduate level course for understanding of computer security technology.
- Lecturer: Engineering Computer Programming, Department of Computer Science and Engineering, Sungkyunkwan University, Fall 2013, Spring 2014. Undergraduate level course for understanding of computer programming (MATLAB and Python).
- Lecturer: Introduction to Information and Communication Engineering, Department of Computer Science and Engineering, Sungkyunkwan University, Fall 2013. Undergraduate level course for understanding fundamental concepts of computer science.
- Organizer: Freshmen Seminar, Department of Computer Science and Engineering, Sungkyunkwan University, Spring 2013. Seminar for undergraduate freshmen.
- Guest Lecturer: Introduction to Computer Security, Department of Electrical and Computer Engineering, University of British Columbia, Fall 2012. Undergraduate level course for understanding of computer security technology.
- Supervision: Part II Projects, Computer Laboratory, University of Cambridge, Michaelmas 2010 – Lent 2011. Undergraduate level project for designing and implementing a practical system.
- Supervision: Security, Computer Laboratory, University of Cambridge, Michaelmas 2010. Undergraduate level course for understanding of computer security technology.
- Supervision: Algorithm II, Computer Laboratory, University of Cambridge, Michaelmas 2010. Undergraduate level course on the introduction to the design and analysis of computer algorithms.
- Supervision: Algorithm I, Computer Laboratory, University of Cambridge, Easter 2010. Undergraduate level course on the introduction to the design and analysis of computer algorithms.
- Supervision: Algorithm II, Computer Laboratory, University of Cambridge, Lent 2010. Undergraduate level course on the introduction to the design and analysis of computer algorithms.
- Supervision: Security, Computer Laboratory, University of Cambridge, Michaelmas 2009. Undergraduate level course for understanding of computer security technology.

- Supervision: Bioinformatics, Computer Laboratory, University of Cambridge, Easter 2009. Undergraduate level course on algorithms and techniques for bioinformatics.
- Supervision: Database, Computer Laboratory, University of Cambridge, Lent 2009. Undergraduate level course on the fundamental concepts in database.
- Supervision: Bioinformatics, Computer Laboratory, University of Cambridge, Lent 2009. Undergraduate level course on algorithms and techniques for bioinformatics.
- Teaching Assistant: Problem Solving (CS 202), Division of Computer Science, KAIST, Fall 2002. Undergraduate level course on the methods for problem solving and algorithm development.
- Teaching Assistant: Design and Analysis of Algorithms (CS 500), Division of Computer Science, KAIST, Spring 2002. Graduate level course on the principles and techniques for design and analysis of computer algorithms.
- Teaching Assistant: Graph Theory (CS 600), Division of Computer Science, KAIST, Fall 2001. Graduate level course on the introduction to topics and applications in graph theory.
- Teaching Assistant: Design and Analysis of Algorithms (CS 500), Division of Computer Science, KAIST, Spring 2001. Graduate level course on the principles and techniques for design and analysis of computer algorithms.
- Teaching Assistant: Algorithms (CS 300), Division of Computer Science, KAIST, Spring 2000. Undergraduate level course on the introduction to the design and analysis of computer algorithms.
- Teaching Assistant: Data Structure (CS 206), Division of Computer Science, KAIST, Fall 1999. Undergraduate level course on the fundamental concepts in data structures and algorithms.

Technical/Special Skills:

- **OS:** Windows and Linux
- **Programming:** C/C++/C#, Python, Java and XML
- **Simulation and Math package:** Matlab and R
- **Languages:** English & Korean (native language)

Appointments and Services:

- **2016-2017:** Member of Program Committee in the Track on Social Network and Media Analysis, the 31st ACM Symposium on Applied Computing.
- **2016-2017:** Member of Program Committee in ACM International Conference on Ubiquitous Information Management and Communication.
- **2016-2017:** Member of Program Committee in IEEE International Conference on Advanced and Trusted Computing.
- **2017:** Member of Program committee in IEEE International Workshop on Big Data Security and Services.
- **2017:** Member of Program committee in International Conference on Information Science and Applications.
- **2017:** Member of Program Committee in International Conference on Complexity, Future Information Systems and Risk.
- **2016:** Member of Program Committee in IEEE International Conference on Information Science and Security.
- **2016:** Member of Program Committee in IEEE ICNP Workshop on Hot Topics in Internet-of-Things.
- **2016:** Member of Program Committee in ACM Workshop on Security in Software Defined Networks & Network Function Virtualization.

- **2016-Present:** Editorial Board in International Journal of Computer & Software Engineering (IJCSE).
- **2015-Present:** Associate Editor in IEEE Consumer Electronics Magazine
- **2014-Present:** Editor of X.sdnsec-1 in ITU-T SG17.
- **2013-Present:** Consultant on security, Samsung Electronics.
- **2012-Present:** Editorial Review Board in International Journal of Privacy and Health Information Management (IJPHIM).
- **2015-2016:** Co-chair of Program Committee in International Conference on Software Security and Assurance.
- **2012-2016:** Member of Program Committee in Workshop on Complex Networks and their Applications.
- **2012-2016:** Member of Program Committee in International Symposium on Foundations and Practices of Security.
- **2015:** Member of Program Committee in International Workshop on Simplifying Complex Networks for Practitioners.
- **2015:** Member of Program Committee in Workshop on Decentralized Social Networks.
- **2015:** Member of Program Committee in IEEE Region 10 Symposium.
- **2015:** Member of Program Committee in IEEE Conference on Standardization for Communications and Networking.
- **2013-2015:** Member of Program Committee in Conference on Information Security and Cryptography.
- **2014:** Co-chair of Program Committee in International Workshop on Simplifying Complex Networks for Practitioners.
- **2014:** Member of Program Committee in IEEE Workshop on Telecom Standards.
- **2014:** Member of Program Committee in International Workshop on Information Security Applications.
- **2014:** Member of Program Committee in International Workshop on Inconspicuous Interaction.
- **2014:** Member of Program Committee in International Workshop on Device Centric Cloud with the 28th AINA, Victoria, Canada, 2014.
- **2013-2014:** Member of Program Committee in International Conference on Wireless Communications and Signal Processing.
- **2007-2008:** Editor of Technical TF in Long Pura Project (with Orange/France Telecom, Intel, CoreMedia and Philips)
- **2005-2007:** Editor of Architecture WC in Coral Standardization.

Awards and Grants:

- **The runner-up award, ICSSA, 2016.**
- **The best paper award, CISC, 2016.**
- **The Korean Ministry of Interior Award for Research Excellence, NETSEC-KR, 2016.**
- **The best paper award, DC2, 2016.**
- **The best student paper award, ICSSA, 2015.**
- **The best paper award, DC2, 2015.**
- **The 3rd place winner, Korea Crypto Award, 2015.**
- **The best paper award, WISA, 2014.**
- **The runner-up award, SIMPEX, 2014.**
- **The 2nd place winner of the Facebook Hackathon at the University of British Columbia, 2012.**
- **NSERC Postdoctoral Fellowship Award: NSERC ISSNet, 2012-2013.**

- **Research Studentship** in the Computer Laboratory with Northrop Grumman Corporation, 2010-2011.
- **Silver Medal in Samsung Electronics Annual Award:** Samsung Electronics, 2007.
- **Full Scholarship:** Ministry of Science and Technology, Korea, 2001-2003.
- **Full Scholarship:** Ministry of Science and Technology, Korea, 1999-2000.
- **Information Engineering Scholarship:** Sungkyunkwan University, 1997-1998.

Publications:

- **Refereed Publications**
 - Joonghwan Lee, Jaewoo Seo, Hoon Ko and **Hyounghshick Kim**, “TARD: Temporary Access Rights Delegation for Guest Network Devices”, Journal of Computer and System Sciences, 2017.
 - Geumhwan Cho, Jun Ho Huh, Junsung Cho, Seongyeol Oh, Youngbae Song and **Hyounghshick Kim**, “SysPal: System-guided Pattern Locks for Android”, S&P: The 38th IEEE Symposium on Security and Privacy, San Jose, USA, 2017.
 - Junsung Cho, Geumhwan Cho, Sangwon Hyun and **Hyounghshick Kim**, “Design of Backdoor on Android Devices”, S&P: The 38th IEEE Symposium on Security and Privacy (Poster), San Jose, USA, 2017.
 - Jun Ho Huh, **Hyounghshick Kim**, Rakesh B. Bobba, Konstantin Beznosov and Swathi Sri V Rayala, “I’m too busy to reset my LinkedIn password: On the effectiveness of password reset emails”, CHI: The 35th ACM SIGCHI Conference on Human Factors in Computing Systems, Denver, USA, 2017.
 - M. Ejaz Ahmed and **Hyounghshick Kim**, “DDoS Attack Mitigation in Internet of Things Using Software Defined Networking”, BigDataSecurity: The 1st Workshop on Big Data Security and Services, held in conjunction with IEEE Big Data Service, San Francisco, USA, 2017.
 - Seunghun Cha, Sungsu Kwag, **Hyounghshick Kim** and Jun Ho Huh, “Boosting the Guessing Attack Performance on Android Lock Patterns with Smudge Attacks”, ASIACCS: The 10th ACM Asia Conference on Computer and Communications Security, Abu Dhabi, UAE, 2017.
 - **Hyounghshick Kim**, “Design of a secure digital recording protection system with network connected devices”, DC2: The 4th Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Taipei, Taiwan, 2017.
 - Junsung Cho, Jaegwan Yu, Sanghak Oh, Jungwoo Ryoo, Jaeseung Song and **Hyounghshick Kim**, “Wrong Siren! A location spoofing attack on indoor positioning systems: the Starbucks case study”, IEEE Communications Magazine, 2017.
 - Jaewoo Park and **Hyounghshick Kim**, “k-Depth Mimicry Attack to Secretly Embed Shellcode into PDF”, ICISA: The 8th International Conference on Information Science and Applications, Macau, China, 2017.
 - Jun Ho Huh, Saurabh Verma, Swathi Sri V Rayala, Rakesh Bobba, Konstantin Beznosov and **Hyounghshick Kim**, “I Don’t Use Apple Pay Because It’s Less Secure ...: Perception of Security and Usability in Mobile Tap-and-Pay”, USEC: The 5th Usable Security Conference, San Diego, USA, 2017.
 - Munkhзориг Dorjmyаgmar, MinChang Kim and **Hyounghshick Kim**, “Security Analysis of Samsung Knox”, ICACT: The 19th International Conference on Advanced Communication Technology, Pheonix Park, Korea, 2017.
 - Jusop Choi, Jaewoo Park and **Hyounghshick Kim**, “Forensic analysis of the backup database file in KakaoTalk messenger”, BigComp: The 4th IEEE

International Conference on Big Data and Smart Computing, Jeju Island, Korea, 2017.

- Mahdi D Firoozjaei, Jaehoon Jeong, Hoon Ko and **Hyounghick Kim**, “Security Challenges with Network Functions Virtualization”, Future Generation Computer Systems, 2017.
- Mahdi D Firoozjaei, Jaegwan Yu, Hyoungkee Choi and **Hyounghick Kim**, “Privacy-Preserving Nearest Neighbor Queries Using Geographical Features of Cellular Networks”, Computer Communications, 2017.
- Sanghak Oh, Eunsoo Kim, Jaehoon Jeong, Hoon Ko and **Hyounghick Kim**, “A Flexible Architecture for Orchestrating Network Security Functions to Support High-Level Security Policies”, IMCOM(ICUIMC): The 11st ACM International Conference on Ubiquitous Information Management and Communication, Beppu, Japan, 2017.
- Jaekwang Kim, **Hyounghick Kim** and Jee-Hyoung Lee, “Analysis and Comparison of Fax Spam Detection Algorithms”, IMCOM(ICUIMC): The 11st ACM International Conference on Ubiquitous Information Management and Communication, Beppu, Japan, 2017.
- Seunghun Cha, Jaewoo Park, Geumhwan Cho, Jun Ho Huh and **Hyounghick Kim**, “WiPING: Wi-Fi signal-based PIN Guessing attack”, CCS: The 23rd ACM Conference on Computer and Communications Security (Poster), Vienna, Austria, 2016.
- Keuntae Lee, Hyungsuk Kang, Jaehoon (Paul) Jeong, **Hyounghick Kim**, and Jung-Soo Park, “Secure DNS Name Autoconfiguration for IPv6 Internet-of-Things Devices”, ICTC: The 7th International Conference on ICT Convergence, Jeju, Korea, 2016.
- Daeyoung Hyun, Jinyoung Kim, Jaehoon (Paul) Jeong, **Hyounghick Kim**, Jung-Soo Park, and Taejin Ahn, “SDN-Based Network Security Functions for VoIP and VoLTE Services”, ICTC: The 7th International Conference on ICT Convergence, Jeju, Korea, 2016.
- Seunghun Cha and **Hyounghick Kim**, “Detecting encrypted traffic: a machine learning approach”, WISA: The 17th World Conference on Information Security Applications, Jeju Island, Korea, 2016.
- Sanghak Oh, Eunsu Kim, and **Hyounghick Kim**, “Empirical analysis of SSL/TLS weaknesses in real websites: Who cares?”, WISA: The 17th World Conference on Information Security Applications, Jeju Island, Korea, 2016.
- Matthew Ruffell, Jin Hong, **Hyounghick Kim** and Dong-Seong Kim, “Towards Automated Exploit Generation for Embedded Systems”, WISA: The 17th World Conference on Information Security Applications, Jeju Island, Korea, 2016.
- Sora Lee, Jinwoo Kim, Sangjun Ko and **Hyounghick Kim**, “A security analysis of paid subscription video-on-demand services for online learning”, ICSSA: The 2nd International Conference on Software Security and Assurance, St. Pölten, Austria, 2016. (selected as “runner-up”)
- Jaegwan Yu, Eunsoo Kim, **Hyounghick Kim** and Jun Ho Huh, “A framework for detecting MAC and IP spoofing attacks with network characteristics”, ICSSA: The 2nd International Conference on Software Security and Assurance, St. Pölten, Austria, 2016.
- Victoria McIntyre, Jungwoo Ryoo, Kyungwon Park and **Hyounghick Kim**, “Developer-Friendly Software Security”, Encyclopedia of Software Engineering (book chapter), 2016.
- Andrea Bianchi, Ian Oakley and **Hyounghick Kim**, “PassBYOP: Bring Your Own Picture for Securing Graphical Passwords”, IEEE Transactions on Human-Machine Systems, 2016.

- Youngbae Song, **Hyounghshick Kim** and Jun Ho Huh, “On the Guessability of Resident Registration Numbers in South Korea”, ACISP: The 21st Australasian Conference on Information Security and Privacy, Melbourne, Australia, 2016.
- Jinyong Kim, Jinho Lee, Jaehoon Jeong, **Hyounghshick Kim**, Jung-Soo Park, and Taeho Kim, “SAN: Self-Adaptive Navigation for Drone Battery Charging in Wireless Drone Networks”, DC2: The 3rd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Crans-Montana, Switzerland, 2016. (selected as “best paper”)
- Mahdi D Firoozjaei, Jaewoo Park and **Hyounghshick Kim**, “Detecting False Emergency Requests Using Callers’ Reporting Behaviors and Locations”, DC2: The 3rd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Crans-Montana, Switzerland, 2016.
- Hyoung-Kee Choi, Ki-Eun Shin and **Hyounghshick Kim**, “A Healthcare Information System for Secure Delivery and Remote Management of Medical Records”, IEICE Transactions on Information and Systems (Special Section on Information and Communication System Security), 2016.
- Eunjo Lee, Jiyoung Woo, **Hyounghshick Kim**, Aziz Mohaisen and Huy Kang Kim, “You are a Game Bot!: Uncovering game bots in MMORPGs via self-similarity in the wild”, NDSS: The 23rd Network and Distributed System Security Symposium, San Diego, California, 2016.
- Geumhwan Cho, Junsung Cho, Youngbae Song, Donghyun Choi and **Hyounghshick Kim**, “Combating online fraud attacks in mobile-based advertising”, EURASIP Journal on Information Security, Vol. 2016(1), 2016.
- Jusop Choi, William Aiken, Jungwoo Ryoo and **Hyounghshick Kim**, “Bypassing the Integrity Checking of Rights Objects in OMA DRM: a Case Study with the MelOn Music Service”, IMCOM(ICUIMC): The 10th ACM International Conference on Ubiquitous Information Management and Communication, Danang, Vietnam, 2016.
- Priya Anand, Jungwoo Ryoo, Hyounghshick Kim and Eunhyun Kim, “Threat Assessment in the Cloud Environment – A Quantitative Approach for Security Pattern Selection”, IMCOM(ICUIMC): The 10th ACM International Conference on Ubiquitous Information Management and Communication, Danang, Vietnam, 2016.
- Jun Ho Huh, Seongyeol Oh, **Hyounghshick Kim**, Konstantin Beznosov, Apurva Mohan, and S. Raj Rajagopalan, “Surpass: System-initiated user-replaceable passwords”, CCS: The 22nd ACM Conference on Computer and Communications Security, Denver, USA, 2015.
- Jinyong Kim, Mahdi Daghmehchi, Jaehoon Jeong, **Hyounghshick Kim**, and Jung-Soo Park, “SDN-based Security Services using Interface to Network Security Functions”, ICTC: The 6th International Conference on ICT Convergence, Jeju Island, Korea, 2015.
- Geumhwan Cho, Junsung Cho, Youngbae Song and **Hyounghshick Kim**, “An empirical study of click fraud in mobile advertising networks”, IWCC: The 4th Workshop on Cyber Crime held in conjunction with ARES, Toulouse, France, 2015.
- Kyungwon Park and **Hyounghshick Kim**, “Encryption Is Not Enough: Inferring user activities on KakaoTalk with traffic analysis”, WISA: The 16th International Workshop on Information Security Applications, Jeju Island, Korea, 2015.
- Hyunsoo Kim, Ji Won Yoon and **Hyounghshick Kim**, “A new technique using a shuffling method to protect confidential documents from shoulder surfers”, ICSSA: The 1st International Conference on Software Security and Assurance, Suwon, Korea, 2015. (selected as “best student paper”)

- Daehyun Kim and **Hyounghshick Kim**, “Performing clickjacking attacks in the wild: 99% are still vulnerable!”, ICSSA: The 1st International Conference on Software Security and Assurance, Suwon, Korea, 2015.
- Priya Anand, Jungwoo Ryoo, and **Hyounghshick Kim**, “Addressing security challenges in cloud computing – a pattern-based approach”, ICSSA: The 1st International Conference on Software Security and Assurance, Suwon, Korea, 2015.
- Jun Ho Huh, **Hyounghshick Kim**, Rakesh B. Bobba, Masooda Bashir and Konstantin Beznosov, “On the Memorability of System-generated PINs: Can Chunking Help?”, SOUPS: The 11st Symposium On Usable Privacy and Security, Ottawa, Canada, 2015.
- Seongyeol Oh, Joon-Sung Yang, Andrea Bianchi and **Hyounghshick Kim**, “Devil in a Box: Installing Backdoors in Electronic Door Locks”, PST: The 13rd International Conference on Privacy, Security and Trust, Izmir, Turkey, 2015.
- Junsung Cho, Geumhwan Cho and **Hyounghshick Kim**, “Keyboard or Keylogger?: a security analysis of third-party keyboards on Android”, PST: The 13rd International Conference on Privacy, Security and Trust, Izmir, Turkey, 2015.
- Jaeseung Song, **Hyounghshick Kim**, and Soojin Park, “Enhancing Conformance Testing using Symbolic Execution for Network Protocols”, IEEE Transactions on Reliability (Special Section on Trustworthy Computing), 2015.
- Eunhyun Kim, Kyung-won Park, **Hyounghshick Kim** and Jaeseung Song, “Design and analysis of enumeration attacks on finding friends with phone numbers: a case study with KakaoTalk”, Computers & Security, 2015.
- Jiwon Yoon, **Hyounghshick Kim**, Hyunjoo Jo, Hyelim Lee and Kwangsu Lee, “Visual Honey Encryption: Application to steganography”, IH&MMSec: The 3rd ACM Workshop on Information Hiding and Multimedia Security, Portland, USA, 2015
- Jina Kang, **Hyounghshick Kim**, Yun Gyung Cheong and Jun Ho Huh, “Visualizing Privacy Risks of Mobile Applications through a Privacy Meter”, ISPEC: The 11st International Conference on Information Security Practice and Experience, Beijing, China, 2015.
- Mahdi Daghmechi Firoozjaei, Jaegwan Yu and **Hyounghshick Kim**, “Privacy Preserving Nearest Neighbor Search based on Topologies in Cellular Networks”, DC2: The 2nd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Gwangju, Korea, 2015. (selected as “best paper”)
- Jaehoon Jeong, Jihyeok Seo, Geumhwan Cho, **Hyounghshick Kim** and Jung-Soo Park, “A Framework for Security Services Based on Software-Defined Networking”, DC2: The 2nd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Gwangju, Korea, 2015.
- Jihyeok Seo, Jaehoon Jeong, **Hyounghshick Kim**, and Jung-Soo Park, “SBUS: Smart e-Bus Battery Substitution Scheme in Vehicular Networks”, DC2: The 2nd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Gwangju, Korea, 2015. (selected as “best student paper”)
- Hyunsu Jang, Jaehoon Jeong, **Hyounghshick Kim**, and Jung-Soo Park, “A Survey on Interfaces to Network Security Functions in Network Virtualization”, DC2: The 2nd Workshop on Device Centric Cloud held in conjunction with IEEE AINA, Gwangju, Korea, 2015.
- **Hyounghshick Kim**, Konstantin Beznosov and Eiko Yoneki, “A Study on the Influential Neighbors to Maximize Information Diffusion in Online Social Networks”, Computational Social Networks, 2015.
- “On the Effectiveness of Pattern Lock Strength Meters – Measuring the Strength of Real World Pattern Locks”, Youngbae Song, Geumhwan Cho, Seongyeol Oh, **Hyounghshick Kim** and Jun Ho Huh, CHI: The 33rd ACM SIGCHI Conference on Human Factors in Computing Systems, Seoul, Korea, 2015.

- William Aiken, Jungwoo Ryoo and **Hyounghick Kim**, “KaaSP: Keying as a Service Provider for Small and Medium Enterprises Using Untrusted Cloud Services”, IMCOM(ICUIMC): The 9th ACM International Conference on Ubiquitous Information Management and Communication, Bali, Indonesia, 2015
- Eunhyun Kim, Kyung-won Park, **Hyounghick Kim** and Jaeseung Song “I’ve Got Your Number: Harvesting users’ personal data via contacts sync for the KakaoTalk messenger”, WISA: The 15th International Workshop on Information Security Applications, Jeju Island, Korea, 2014. (selected as “best paper”)
- Jina Kang, Daehyun Kim, **Hyounghick Kim** and Jun Ho Huh “Analyzing unnecessary permissions requested by Android apps based on users’ opinions”, WISA: The 15th International Workshop on Information Security Applications, Jeju Island, Korea, 2014.
- Youngbae Song, **Hyounghick Kim** and Aziz Mohaisen, “A Private Walk in the Clouds: Using End-to-End Encryption between Cloud Applications in a Personal Domain”, TrustBus: The 11st International Conference on Trust, Privacy & Security in Digital Business, Munich, Germany, 2014.
- Jaeseung Song and **Hyounghick Kim**, “iVisher: A system for real-time caller ID spoofing detection”, ETRI Journal, 2014.
- **Hyounghick Kim**, Konstantin Beznosov and Eiko Yoneki, “Finding Influential Neighbors to Maximize Information Diffusion in Twitter”, SIMPLEX: The 6th Annual Workshop on Simplifying Complex Networks for Practitioners”, held in conjunction with WWW, Seoul, Korea, 2014.
- **Hyounghick Kim**, “Don’t Count The Number of Friends When you Are Spreading Information in Social Networks”, IMCOM(ICUIMC): The 8th ACM International Conference on Ubiquitous Information Management and Communication, Siem Reap, Cambodia, 2014.
- Daehyun Kim and **Hyounghick Kim**, “We are still vulnerable to clickjacking attacks: about 99% of Korean websites are dangerous”, WISA: The 14th International Workshop on Information Security Applications, Jeju Island, Korea, 2013.
- Antoine Boutet, **Hyounghick Kim** and Eiko Yoneki, “What’s in Twitter: I Know What Parties are Popular and Who You are Supporting Now!”, Social Network Analysis and Mining, Vol. 3(4), 2013.
- **Hyounghick Kim** and Jaeseung Song, “Social network analysis of patent infringement lawsuits”, Technological Forecasting & Social Change, Vol. 80(5), 2013.
- **Hyounghick Kim** and Ross Anderson, “An Experimental Evaluation of Robustness of Networks”, IEEE Systems Journal, Vol. 7(2) (Special Issue on Security and Privacy in Complex Systems), 2013.
- Antoine Boutet, **Hyounghick Kim** and Eiko Yoneki, “What’s in Twitter: I Know What Parties are Popular and Who You are Supporting Now!”, ASONAM: The 4th IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Istanbul, Turkey, 2012.
- **Hyounghick Kim** and Eiko Yoneki, “Influential Neighbours Selection for Information Diffusion in Online Social Networks”, ICCCN: The 21st IEEE International Conference on Computer Communication Networks, Munich, Germany, 2012.
- **Hyounghick Kim**, Jon Crowcroft and Fernando M.V. Ramos, “Efficient Channel Selection Using Hierarchical Clustering”, WoWMoM: The 13th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, San Francisco, USA, 2012.
- John Tang, **Hyounghick Kim**, Cecilia Mascolo and Mirco Musolesi, “STOP: Socio-Temporal Opportunistic Patching of Short Range Mobile Malware”,

WoWMoM: The 13th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks, San Francisco, USA, 2012.

- **Hyounghick Kim**, Wei Ming Khoo and Pietro Lio', "Polymorphic Attacks against Sequence-based Software Birthmarks", SSP: The 2nd International workshop on Software Security and Protection, held in conjunction with ACM PLDI, Beijing, China, 2012.
- Antoine Boutet, **Hyounghick Kim** and Eiko Yoneki, "What's in Your Tweets? I Know Who You Supported in the UK 2010 General Election", ICWSM: The 6th International AAAI Conference on Weblogs and Social Media, Dublin, Ireland, 2012.
- **Hyounghick Kim** and Jun Ho Huh, "PIN selection policies: are they really effective?", Computers & Security, Vol. 31(4), 2012.
- **Hyounghick Kim**, John Tang and Ross Anderson, "Social Authentication: Harder than it Looks", FC: The 16th IFCA International Conference on Financial Cryptography and Data Security, Kralendijk, Bonaire, 2012
 - There's press coverage. [[New Scientist, Jan. 25, 2012](#)] [[Light Blue Touchpaper, Feb. 22, 2012](#)]
- **Hyounghick Kim**, John Tang, Ross Anderson and Cecilia Mascolo, "Centrality Prediction in Dynamic Human Contact Networks", Computer Networks, Vol. 56(3) (Special Issue on Complex Dynamic Networks: Tools and Methods), 2012.
- **Hyounghick Kim** and Ross Anderson, "Temporal Node Centrality in Complex Networks", Physical Review E, Vol. 85(2), 2012.
 - There's press coverage. [[University of Cambridge Research News, Feb. 20, 2012](#)] [[Light Blue Touchpaper, Jan. 18, 2012](#)]
- Yunsang Oh, **Hyounghick Kim** and Takashi Obi, "Privacy-Enhancing Queries in Personalized Search with Untrusted Service Providers", IEICE Transactions on Information and Systems, Vol. 95-D(1) (Special Section on Trust, Security and Privacy in Computing and Communication Systems), 2012.
- **Hyounghick Kim**, Ji Won Yoon and Jon Crowcroft, "Network Analysis of Temporal Trends in Scholarly Research Productivity", Journal of Informetrics, Vol. 6(1), 2012.
- Jun Ho Huh, **Hyounghick Kim**, John Lyle and Andrew Martin, "Achieving attestation with less effort: an indirect and configurable approach to integrity reporting", STC: The 6th ACM Workshop on Scalable Trusted Computing, held in conjunction with ACM CCS, Chicago, USA, 2011.
- **Hyounghick Kim** and Jaehoon Jeong, "RAD: Recipient-Anonymous Data Delivery based on Public Routing Proxies", Computer Networks, Vol. 55(15), 2011.
- **Hyounghick Kim** and Jun Ho Huh, "Detecting DNS Poisoning Based Phishing Attacks from their Network Performance Characteristics", Electronics Letters, Vol. 47(11) (Selected as a highlight), 2011.
- Jun Ho Huh and **Hyounghick Kim**, "Phishing Detection with Popular Search Engines: Simple and Effective", FPS: The 4th Canada-France MITACS Workshop on Foundations & Practice of Security, Paris, France, 2011. Reprinted in Lecture Notes in Computer Science (LNCS), Number 6888, 2011.
- Ji Won Yoon and **Hyounghick Kim**, "A Perfect Collision-free Pseudonym System", IEEE Communications Letters, Vol. 15(6), 2011.
- Ji Won Yoon, Hyoung-joo Lee and **Hyounghick Kim**, "Effective measurement selection in truncated kernel density estimator", ICUIMC: The 5th ACM International Conference on Ubiquitous Information Management and Communication, Suwon, Korea, 2011.

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