

Candidate for ITU-T SG17 Chairman

Biographical profile

Name : Heung Youl YOUM

Affiliation Name : Soonchunhyang University, Korea (Republic of)

Affiliation Address : 22, Soonchunhyang-ro, Shinchang-myeon, Asan-si, Chuncheongnam-do,
336-745, Republic of KOREA

Mobile / E-mail : +82-10-3764-6380 / hyyoum@sch.ac.kr

PERSONAL

Family name : YOUM

First name : Heung Youl

Date of birth : 10 February 1959

Nationality : Korea (Republic of)

Marital status : Married

Languages: English and Korean (mother tongue)

Study Group: ITU-T SG 17 on Security



STUDIES

1983.09 - 1990.02 Ph.D., Department of Electronics Engineering, Hanyang Graduate University, Korea

1981.09 - 1983.02 M.S., Department of Electronics Engineering, Hanyang Graduate University, Korea

1977.03 - 1981.02 B.E., Department of Electronics Engineering, Hanyang University, Korea

MAJOR ACTIVITIES & ACHIEVEMENTS

1990.09 – Present Professor, Department of Information Security Engineering, Soonchunhyang University, Korea

2014.12 – Present Director, SCH Cybersecurity Research Center, Soonchunhyang University, Korea

2009.01 – Present	Chairman, Korea Mirror Group of ITU-T SG 17 (HoD for SG17 Korean delegation)
2007.04 – Present	Chairman, ISMS/PIMS Certification Committee in Korea
2016.05 – Present	Chairman, Privacy & Security Enhancement Forum (PSEF)
2013.08 – Present	Member, Self-Performance Evaluation Committee of Ministry of Science, ICT, and Future Planning (MSIP)
2008.08 – 2016.06	Member, Self-Performance Evaluation Committee of Korea Communications Commission (KCC)
2015.05 – Present	Member, Korea Standard Committee, Ministry of Trade, Industry and Energy (MoTIE)
2015.08 – Present	Member, Self-Performance Evaluation Committee of Ministry of Trade, Industry and Energy (MoTIE)
2015.03 – Present	Chairman, Committee on Information Security, PyeongChang Organizing Committee for the 2018 Olympic & Paralympic Winter Games
2012.06 – 2015.04	Chairman, Korea Information Security Standardization Forum (KISSF)
2011.01 – 2011.12	President, Korea Institute of Information Security and Cryptology (KIISC), Academic association)
2011.01 – Present	General Co-chair, Asia Joint Conference on Information Security (Asia JCIS)
2011.01 – 2011.12	General Chair, WISA2011 (International Workshop on Information Security Applications) and ICISC2011 (International Conference on Information Security and Cryptology)
2012.01 – 2012.12	General Chair, ACM Symposium on Information, Computer and Communications Security (ASIACCS2012)
2006.10 – 2009.02	Project manager, (Former) Ministry of Information Communications and/or the Institute for Information Technology Advancement
1982.12 – 1990.09	Senior Member of Technical Staff, ETRI (Electronics and Telecommunications Research Institute)

INTERNATIONAL STANDARDIZATION-RELATED EXPERIENCE

2008.10 – present	Vice-chairman, ITU-T SG 17 (Security)
2013.01 – present	Chairman, ITU-T SG 17 Working party 3 (Identity management and cloud computing security)
2016.03 – present	Acting Chairman, ITU-T SG 17 Working party 2 (Network and information security)
2013.03 – present	SG17 liaison officer for ISO/IEC JTC 1/SC 27/WG 5 and WG 4
2012.04 – present	Chairman/vice-chairman, CJK ICT Standards Meeting, Working Group on Information Security
2016.03 – present	SG17 Liaison officer to ITU-T TSAG RG-SS
2015.09, 2016.03	Chairman, Special joint session of all Questions for WTSA-16 preparation

2011.09, 2012.03	Chairman, Special joint session of all Questions for WTSA-12 preparation
2009.01 – 2012.12	Chairman, ITU-T SG 17 Working party 2 (Application Security)
2005.01 – 2008.12	Rapporteur, ITU-T SG 17 Question 9 (Secure application service)
2003.09 – 2004.12	Associate Rapporteur, ITU-T SG 17 Question 10
2005.01 – present	Editor or co-editor, approved Recommendation or agreed Supplements/International Standard, ITU-T X.1034, X.1111, X.1121, X.1122, X.1151, X.1158, X.1191, X.1193, X.1196, X.1197, X.1208, X.1210, X.1211, X.1311, X Suppl. 8 to ITU-T X.1205, X Suppl. 9 to ITU-T X.1205, X Suppl. 10 to ITU-T X.1205, X Suppl. 24 to ITU-T X.1120-X.1139 series, ISO/IEC 27033-4
2011.09 – present	Editor or co-editor, draft ITU-T Recommendations or Supplements under development, ITU-T X.gpim, X.sup-gpim, X.sbb, X.gcspi, X.iotsec-2, X.msec-9, X.1254rev, X.te

BOOK PUBLICATION

2008.03	Computer networking and the internet. -- 5th ed., FRED HALSALL (translated into Korean)
2003. 02	IP Sec: securing VPN's, CARLTON R.DAVIS, (translated into Korean)
2005.11	Security in computing, PFLEEGER, (translated into Korean)
1999.09	Electronic Commerce Security

SUMMARY

Dr. Heung Youl Youm is a candidate for chairman of ITU-T Study Group 17, Security. As outlined below, he has proven leadership (management) skills, depth of technical knowledge of security, and successful connectivity to other important organizations. His experience and accomplishments in SG17 since 2003 at both the technical and management levels are impressive.

He began participating in ITU-T SG 17 in 2003 and has actively contributed to the work of SG17 as a core member of security experts for 13 years. He was an associate Rapporteur of SG 17 Question 10/17 “Security requirements, models and guidelines for communication systems and services” from 2003 to 2004. For the Study Period (2005 – 2008), he served as a Rapporteur of Question 9/17 “Secure Applications Service”.

He has been a Vice Chairman of ITU-T Study Group 17 since 2009. He was Chairman of Working Party 2 (Application Security) of SG17 for the Study Period (2009–2012) and is Chairman of Working Party 3 (Identity management and cloud computing security) of SG17 for this Study Period (2013–2016). Recently, he was appointed as a SG17 Liaison officer to ITU-T TSAG RG-SS in March 2016. Due to his strong leadership and technical contributions, SG 17 has successfully published many excellent security Recommendations of X-series.

He has attended every regular SG17 meeting in person without exceptions since he joined SG17 in 2003 and submitted many technical and management-relevant Contributions to every SG17 meeting. Especially, he has submitted more than 10 Contributions or at least 10 TDs to each SG17 meeting every year since 2009.

He has often chaired special sessions for resolving pending issues in SG17, for example, for task allocation in the cloud computing security work between SG 13 and SG 17 in this Study Period.

He demonstrated his leadership by chairing the special joint sessions of all SG17 Questions for WTSA-16 preparation (2015– 2016) and WTSA-12 preparation (2011–2012), respectively, resulting in successful SG17's restructuring and visions for the next Study Periods.

He has participated in TSAG meetings and submitted Contributions related to the work of SG17. He participated in WTSA-08 and WTSA-12 and submitted a Contribution on revision of WTSA Resolution 50 (Cybersecurity) to WTSA-12, which is directly relevant to the work of SG17. He participated in ITU plenipotentiary meeting and supported revision of ITU PP-130, which took place in Busan, Korea in 2014.

He is a SG17 liaison representative to ISO/IEC JTC1/SC27 (IT Security techniques), the most important collaborative partner of SG17, since 2010 and especially to SC 27/WG 4 (Security controls and services) and WG 5 (Identity management and privacy technologies).

He has been a Project Editor or Co-editor for 18 approved ITU-T Recommendations or agreed Supplements in the area of IPTV security, home network security, authentication protocol, USN security, mobile security, and cybersecurity:

- X.1034: Guidelines on extensible authentication protocol based authentication and key management in a data communication network, 2011
- X.1111: Framework of security technologies for home network, 2007
- X.1121: Framework of security technologies for mobile end-to-end data communications, 2004
- X.1122: Guideline for implementing secure mobile systems based on PKI, 2004
- X.1151: Guideline on secure password-based authentication protocol with key exchange, 2007.
- X.1158: Multi-factor authentication mechanisms using a mobile device, 2014
- X.1191: Functional requirements and architecture for IPTV security aspects, 2009
- X.1193: Key management framework for secure internet protocol television (IPTV) services, 2011
- X.1196: Framework for the downloadable service and content protection system in the mobile Internet Protocol television environment, 2012
- X.1197: Guidelines on criteria for selecting cryptographic algorithms for IPTV service and content protection, 2012
- X.1208: A cybersecurity indicator of risk to enhance confidence and security in the use of telecommunication/information and communication technologies, 2014
- X.1210: Overview of source-based security troubleshooting mechanisms for Internet protocol-based networks, 2014
- X.1211: Techniques for preventing web-based attacks, 2014
- X.1311: Information technology – Security framework for ubiquitous sensor networks, 2011
- X Suppl. 8: ITU-T X.1205 – Supplement on best practices against botnet threats, 2010
- X Suppl. 9: ITU-T X.1205 – Supplement on guidelines for reducing malware in ICT networks, 2011
- X Suppl. 10: ITU-T X.1205 – Supplement on usability of network traceback, 2014
- X Suppl. 24: ITU-T X.1120-X.1139 series – Supplement on a secure application distribution framework for communication devices, 2014

He is currently the Project Editor for 9 draft ITU-T Recommendations or Supplements under development in the area of PII protection, IoT security, and authentication framework:

- X.tigsc, Technical implementation guidelines for ITU-T X.805

- X.gpim | ISO/IEC DIS 29151, Information technology - Security techniques - Code of practice for Personally Identifiable Information protection
- X.sup-gpim, ITU-T X.gpim - Supplement on Code of practice for personally identifiable information protection based on ITU-T X.gpim for telecommunications organizations
- X.gcspi, ITU-T X.1242 - Supplement on Guidelines on countermeasures against short message service (SMS) phishing and smishing attack
- X.iotsec-2, Security framework for Internet of Things
- X.msec-9, Functional security requirements and architecture for mobile phone anti-theft measures
- X.te, Trust elevation protocol
- X.1254Rev, Entity authentication assurance framework
- X.sbb, Security capability requirements for countering smartphone-based botnets

He has actively participated in work for ISO/IEC JTC 1/SC 27 since 2009. He served as an Editor for the published International Standard, *ISO/IEC 27033.4:2014, Information technology -- Security techniques -- Network security -- Part 4: Securing communications between networks using security gateways*. He is an editor of two International Standards under development: ITU-T X.gpim | ISO/IEC DIS 29151, *Information technology -- Security techniques -- Code of practice for personally identifiable information protection* and ISO/IEC DIS 29134, *Information technology -- Security techniques -- Privacy impact assessment – Guidelines*.

He has been a Chairman or vice chairman of the Working Group of information security for the CJK ICT standards meeting since April 2012.

He has been the Chairman of the Korea Mirror Group of the ITU-T Study Group 17 since 2009 and is a Chairman of the Privacy & Security Forum which was newly established on May 2016.

He joined ETRI (Electronics and Telecommunications Research Institute) in 1982. He had been a senior member of technical staff working on development of high speed transmission systems until 1990.

From 1990, he has worked as a professor for the Department of Information Security Engineering of the Soonchunhyang University, Korea. He is currently the Director of SCH cybersecurity research centre in Soonchunhyang University.

Regarding his research and academic achievements, he wrote and co-edited more than 5 books in the area of information security including “Computer networking and the internet (2008)”, “An Introduction to Information Security (2005)”, “Security in computing (2005)”, “IPSec securing VPNs(2003)” and “Electronic Commerce Security (1999)” published in Korean, and also published more than 150 papers including 12 SCIE or IEEE EI ones. He was the President of the Korea Institute of Information Security and Cryptology (KIISC) in 2011. He has been a general co-chairman for Asia Joint Conference on Information Security (Asia JCIS) since 2011 and was a general chair for ACM Symposium on Information, Computer and Communications Security (ASIACCS2012) in 2012.

He had worked as a Project Manager of Information Security for the former Ministry of Information and Communication (MIC) and/or the Institute for Information Technology Advancement (IITA) from October 2006 to February 2009.

He is active in many (advisory or self-performance evaluation) committees in the area of Information Security and privacy for the Korea Communications Commission (KCC) since 2008, the Ministry of Science, ICT and Future Planning (MSIP) since 2013, and the Ministry of Trade, Industry and Energy (MoTIE) since 2015. He is Chairman for the ISMS/PIMS certification committee in Korea since 2007 and chairman for the committee on information security in the PyeongChang Organizing Committee for the 2018 Olympic & Paralympic Winter Games.

He received a Bachelor degree in 1981, a Master degree in 1983, and a Ph.D. degree in 1990, all in Electronics Engineering from Hanyang University, Korea.

He received achievement awards from the Korean President in October 2014, KCC (Korea Communications Commission) in December 2009 and December 2015, Ministry of Science, ICT and future planning in December 2015, and Korea Institute of Information security and Cryptology in December 2015.