

Junsung Cho

CONTACT INFORMATION	Department of Electrical and Computer Engineering Sungkyunkwan University, Republic of Korea	+82 31 299 4104 js.cho@skku.edu
RESEARCH INTERESTS	Human/Device Authentication, Security Engineering, Blockchain, Mobile Security, Internet of Things Security and Usable Security	
STATUS	Researcher in IT Convergence Research Institute, Sungkyunkwan University, Republic of Korea	2017–present
	Ph.D. Candidate (combined Master/Ph.D course) in Security Engineering, College of Information and Communication Engineering, Sungkyunkwan University, Republic of Korea	2014–present
	<ul style="list-style-type: none">• Supervisor: Prof. Hyounghick Kim	
EDUCATION	B.S. in Computer Engineering School of Computer Science and Engineering, Korea University of Technology and Education, Republic of Korea	2010–2014
	<ul style="list-style-type: none">• Supervisor: Prof. Sangjin Kim	
PUBLICATIONS	<ol style="list-style-type: none">1. “On the Security and Usability Implications of Multiple Authentication Choices”, Geumhwan Cho, Jun Ho Huh, Soolin Kim, Junsung Cho, Heesung Park, Yenah Lee, Konstantin Beznosov, and Hyounghick Kim, ACM Transactions on Privacy and Security (<i>IF 1.714</i>), 2020. (in minor revision)2. “ACIDroid: A Practical App Cache Integrity Protection System on Android Runtime”, Jusop Choi, Soolin Kim, Junsung Cho, Kuyju Kim, Seok Hong and Hyounghick Kim, SAC: The 35th ACM/SIGAPP Symposium On Applied Computing, Brno, Czech Republic, 2020. (accepted)3. “Data-driven selection of application frameworks during architectural design”, Humberto Cervantes, Rick Kazman, Jungwoo Ryoo, Junsung Cho, Geumhwan Cho, Hyounghick Kim and Jina Kang, HICSS: The 52nd Hawaii International Conference on System Sciences, Hawaii, USA, 2019.4. “Design and Analysis of Push Notification-Based Malware on Android”, Sangwon Hyun, Junsung Cho, Geumhwan Cho and Hyounghick Kim, Security and Communication Networks (<i>IF 1.376</i>), Vol. 2018, 2018.5. “The Personal Identification Chord: A Four Button Authentication System for Smartwatches”, Ian Oakley, Jun Ho Huh, Junsung Cho, Geumhwan Cho, MD. Rasel Islam and Hyounghick Kim, ASIACCS: The 11th ACM Asia Conference on Computer and Communications Security, Incheon, Korea, 2018.6. “User Credential Cloning Attacks in Android Applications: Exploiting Automatic Login on Android Apps and Mitigating Strategies”, Junsung Cho, Dayeon Kim and Hyounghick Kim, IEEE Consumer Electronics Magazine (<i>IF 3.273</i>), Vol. 7(3), 2018.7. “Hello, Facebook! Here is the stalkers’ paradise!: Design and analysis of enumeration attack using phone numbers on Facebook”, Jinwoo Kim, Kuyju Kim, Junsung	

- Cho**, Hyoungshick Kim and Sebastian Schrittwieser, ISPEC: The 13rd International Conference on Information Security Practice and Experience, Melbourne, Australia, 2017.
8. “Open Sesame! Design and Implementation of a Backdoor to Secretly Unlock Android Devices”, **Junsung Cho**, Geumhwan Cho, Sangwon Hyun and Hyoungshick Kim, MobiSec: The International Symposium on Mobile Internet Security, Jeju Island, Korea, 2017.
 9. “Open Sesame! Design and Implementation of a Backdoor to Secretly Unlock Android Devices”, **Junsung Cho**, Geumhwan Cho, Sangwon Hyun and Hyoungshick Kim, Journal of Internet Services and Information Security, Vol. 7(4), 2017.
 10. “IoE Security Threats and You”, Jungwoo Ryoo, Soyoung Kim, **Junsung Cho**, Hyoungshick Kim, Simon Tjoa and Christopher Derobertis, ICSSA: The 3rd International Conference on Software Security and Assurance, Altoona, USA, 2017.
 11. “SysPal: System-guided Pattern Locks for Android”, Geumhwan Cho, Jun Ho Huh, **Junsung Cho**, Seongyeol Oh, Youngbae Song and Hyoungshick Kim, S&P: The 38th IEEE Symposium on Security and Privacy, San Jose, USA, 2017.
 12. “Design of Backdoor on Android Devices”, **Junsung Cho**, Geumhwan Cho, Sangwon Hyun and Hyoungshick Kim, S&P: The 38th IEEE Symposium on Security and Privacy (Poster), San Jose, USA, 2017.
 13. “Wrong Siren! A location spoofing attack on indoor positioning systems: the Starbucks case study”, **Junsung Cho**, Jaegwan Yu, Sanghak Oh, Jungwoo Ryoo, Jaeseung Song and Hyoungshick Kim, IEEE Communications Magazine (*IF 10.356*), Vol. 55(3), 2017.
 14. “Combating online fraud attacks in mobile-based advertising”, Geumhwan Cho, **Junsung Cho**, Youngbae Song, Donghyun Choi and Hyoungshick Kim, EURASIP Journal on Information Security, Vol. 2016(1), 2016.
 15. “An empirical study of click fraud in mobile advertising networks”, Geumhwan Cho, **Junsung Cho**, Youngbae Song and Hyoungshick Kim, IWCC: The 4th Workshop on Cyber Crime held in conjunction with ARES, Toulouse, France, 2015.
 16. “Keyboard or Keylogger?: a security analysis of third-party keyboards on Android”, **Junsung Cho**, Geumhwan Cho and Hyoungshick Kim, PST: The 13rd International Conference on Privacy, Security and Trust, Izmir, Turkey, 2015.

PATENTS

1. “Sound-based one-time password two-phase authentication method”, **Junsung Cho**, Sora Lee, Hyoungshick Kim, KR 10-1989610, 2019.
2. “Method of sharing key between devices using physical access restriction”, Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, Kyoungwon Park, **Junsung Cho** and Jaegwan Yu, US 10-298557 B2, 2019.
3. “Method, apparatus, and system for automatically generating rule for detecting virus code, and computer readable recording medium for recording the same”, Geumhwan Cho, **Junsung Cho** and Hyoungshick Kim, KR Patent 10-1907681, 2018.
4. “A method and system of crypto-currency transaction management based on crypto-currency wallet”, Hyoungshick Kim, **Junsung Cho**, KR Patent Application 10-2018-0009307, 2018.

5. "Secure drone communication protocol", Hyoungshick Kim, Geumhwan Cho, **Junsung Cho**, KR Patent Application 10-2017-0168298, 2017.
6. "Sound-based one-time password two-phase authentication method", **Junsung Cho**, Sora Lee, Hyoungshick Kim, KR Patent Application 10-2017-0101632, 2017.
7. "Method, apparatus, and system for automatically generating rule for detecting virus code, and computer readable recording medium for recording the same", Geumhwan Cho, **Junsung Cho** and Hyoungshick Kim, KR Patent Application 10-2017-0024455, 2017.
8. "Method of sharing key between devices using physical access restriction", Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, **Junsung Cho**, Kyoungwon Park and Jaegwan Yu, JP 2016093637 A, 2016.
9. "Method of sharing key between devices using physical access restriction", Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, **Junsung Cho**, Kyoungwon Park and Jaegwan Yu, CN 201610301397 A, 2016.
10. "Method of sharing key between devices using physical access restriction", Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, Kyoungwon Park, **Junsung Cho** and Jaegwan Yu, US 201615146962 A, 2016.
11. "Method of sharing key between devices using physical access restriction", Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, **Junsung Cho**, Kyoungwon Park and Jaegwan Yu, DE 102016207736 A, 2016.
12. "Method of sharing key between devices using physical access restriction", Sanghun Jeon, Hyoungshick Kim, Minsoo Kim, **Junsung Cho**, Kyoungwon Park and Jaegwan Yu, TW 105112877 A, 2016.
13. "Method of sharing key between devices using physical access restriction", Hyoungshick Kim, **Junsung Cho**, Kyoungwon Park and Jaegwan Yu, KR 20150064976 A, 2015.

APPOINTMENTS	Member of Organizing Committee in International Conference on Software Security and Assurance (ICSSA)	2015
AWARDS AND GRANTS	Student Travel Grants, 38th IEEE Symposium on Security and Privacy	2017
	The best presentation award, A3 workshop	2016
	The best paper award, CISC 2015	2015
	National cryptography competition, National Security Research Institute	2015
TEACHING EXPERIENCE	Teaching Assistant Sungkyunkwan University, Republic of Korea	
	<ul style="list-style-type: none"> ● SWE3031 - Network Project Instructor: Prof. Hyoungshick Kim 	Spring 2019
	<ul style="list-style-type: none"> ● ICE2002 - Data Structures Instructor: Prof. Hyoungshick Kim 	Fall 2018
	<ul style="list-style-type: none"> ● ECE5967 - Security Engineering Instructor: Prof. Hyoungshick Kim 	Spring 2018
	<ul style="list-style-type: none"> ● ICE2002 - Data Structures Instructor: Prof. Hyoungshick Kim 	Fall 2017
	<ul style="list-style-type: none"> ● ICE2002 - Data Structures Instructor: Prof. Hyoungshick Kim 	Spring 2017

- ICE2002 - Data Structures **Fall 2016**
Instructor: Prof. Hyounghick Kim
- ECE5967 - Security Engineering **Spring 2016**
Instructor: Prof. Hyounghick Kim
- CSE2014 - Basic Programming Languages **Spring 2016**
Instructor: Prof. Hyounghick Kim
- CSE2014 - Basic Programming Languages **Fall 2015**
Instructor: Prof. Jaeyoung Choi
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REFERENCES

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