## Dongkwan Kim

Postdoctoral Fellow, SSLab School of Cybersecurity and Privacy Georgia Institute of Technology



#### WORK EXPERIENCE

#### Georgia Tech, Postdoctoral Fellow, Atlanta, GA

 $Feb\ 2025-Present$ 

DARPA AIxCC Winner: Designed and implemented LLM-based autonomous fuzzing and exploit agents.

· Leveraging LangGraph, LangChain, LiteLLM, and Phoenix.

Currently leading the evaluation of AI's offensive potential in real-world cybersecurity scenarios.

Manager: Prof. Taesoo Kim

Samsung Security Center, Samsung SDS, Senior Engineer, South Korea Aug 2022 – Dec 2024

Drove Red Team operations across AI systems, IoT devices, Android apps, and kernel-level mitigations.

- · Secured 30+ consumer and enterprise products, protecting 1B+ users.
- $\cdot$  Delivered executive-level reports and gave organization-wide presentations to 500+ security engineers. Shared insights on AI system security at 6 industry and academic venues.
  - · Securing prompt injection chains against remote code execution, impersonation, and sensitive data leak.

#### KAIST, Postdoctoral Researcher, South Korea

 $Mar\ 2022 - Jul\ 2022$ 

Conducted advanced research on:

- · Smartphone baseband authentication bypass (USENIX Security '23)
- · Acoustic signal injection attacks against drone sensors and recovery techniques (NDSS'23)
- · EMI signal injection on drone sensory communication channels (NDSS'23)

Manager: Prof. Yongdae Kim

#### Pinion Industries, Research Intern, South Korea

Dec 2013 - Feb 2014

Analyzed automotive CAN messages and exploited in-vehicle components, achieving RCE and wiretapping.

#### KAIST CERT, Student Senior, South Korea

Sep 2010 - Aug 2012

Led the student team (Sep 2011 – Aug 2012) in campus-wide security assessment under the KAIST domain. Investigated security incidents, including probing a serious life-threatening email attack leading to arrest.

### **EDUCATION**

#### Korea Advanced Institute of Science and Technology (KAIST), South Korea

Ph.D. in School of Electrical Engineering

Mar 2016 – Feb 2022

- · Thesis Title: Improving Large-Scale Vulnerability Analysis of IoT Devices with Heuristics and Binary Code Similarity
- · Advisor: Prof. Yongdae Kim

M.S. in School of Electrical Engineering

Mar 2014 – Feb 2016

- · Thesis Title: Dissecting VoLTE: Exploiting Free Data Channels and Security Problems
- · Advisor: Prof. Yongdae Kim

 ${\bf B.S.}$  in School of Computing

Feb 2010 - Feb 2014

#### EURECOM, France

Visiting Scholar in Software and System Security

Jun 2014 - Jul 2014

- · Learned embedded device analysis techniques, particularly for debugging interfaces
- · Advisor: Prof. Aurélien Francillon

## HONORS & AWARDS

#### Hacking Contests (i.e., Capture-the-flag, CTF) Finalist, DEFCON 27 CTF (Team KaisHack GoN) Aug 2019 Finalist, DEFCON 26 CTF (Team KaisHack+PLUS+GoN) Aug 2018 1st place (\$20,000), HDCON CTF (Team maxlen) Nov 2017 1st place (\$30,000), Whitehat Contest (Team Old GoatskiN) Nov 2017 3rd place (\$5,000), Codegate CTF (Team Old GoatskiN) Apr 2017 Finalist, DEFCON 24 CTF (Team KaisHack GoN) Aug 2016 1st place (\$20,000), Whitehat Contest (Team SysSec) Nov 2014 Finalist, DEFCON 22 CTF (Team KAIST GoN) Aug 2014 Silver prize (\$2,000), HDCON CTF (Team GoN) Dec 2013 1st place (\$20,000), Whitehat Contest (Team KAIST GoN) Oct 2013 Finalist, DEFCON 20 CTF (Team KAIST GoN) Jul 2012 Silver prize (\$2,000), HDCON CTF (Team KAIST GoN) Jul 2012 3rd place (\$5,000), Codegate CTF 2012 (Team KAIST GoN) Apr 2012 1st place (\$10,000), ISEC CTF (Team GoN) Sep 2011 1st place (\$1,000), PADOCON CTF (Team GoN) Jan 2011 Academic Awards Best Paper Award, CISC-W Nov 2020 · Title: Standard-based User Identifier Mapping Attack Prevention Method for LTE Network Best Presentation Award, A3 Security Workshop Feb 2016 · Title: Breaking and Fixing VoLTE: Exploiting Hidden Data Channels and Mis-implementations Best Paper Award, WISA Aug 2015 · Title: BurnFit: Analyzing and Exploiting Wearable Devices Reported Security Vulnerabilities CVE-2015-6614, Android telephony privilege escalation, Google Oct 2015 Government-Issued Certificates Engineer Information Security, South Korea Jun 2016 Engineer Information Processing, South Korea May 2013 Scholarships

 $Feb\ 2010-Feb\ 2020$ 

National Scholarship (Science and Engineering), Korea Student Aid Foundation

## **PATENTS**

| In                        | ternational Registrations  |
|---------------------------|--|
| [1]                       | US 10111120 Oct 2018   |
|                           | Method and Apparatus for Checking Problem in Mobile Communication Network  |
| Do                        | omestic Registrations, South Korea   |
| [1]                       | KR 10-2514809 Mar 2023   |
|                           | VIDEO IDENTIFICATION METHOD IN LTE NETWORKS AND THE SYSTEM THEREOF   |
| [2]                       | KR 10-2418212 Jul 2022   |
|                           | ARCHITECTURE-INDEPENDENT SIMILARITY MEASURING METHOD FOR PROGRAM FUNCTION  |
| [3]                       | KR 10-2415494 Jun 2022   |
| F . 3                     | Emulation based security analysis method for embedded devices  |
| [4]                       | KR 10-2333866 Nov 2021   |
| [=1                       | Method and Apparatus for Checking Problem in Mobile Communication Network  |
| [5]                       | KR 10-1972825  Apr 2019  |
|                           | Method and apparatus for automatically analyzing vulnerable point of embedded appliance by using hybrid analysis technology, and computer program for executing the method |
| [6]                       | <b>KR 10-1868836</b> Jun 2018  |
|                           | A method to attack commercial drones using the resonance effect of gyroscopes by sound waves   |
| $\mathbf{A}_{\mathbf{I}}$ | pplications  |
| [1]                       | KR 10-2022-0132964 Oct 2022  |
|                           | ANTI-DRONE SYSTEM THROUGH COMMUNICATION DISTORTION BETWEEN SENSOR AND CON-   |
|                           | TROL UNIT AND ITS OPERATION METHOD   |
| [2]                       | KR 10-2021-0168382 Nov 2021  |
|                           | Method and System for Automatically Analyzing Bugs in Cellular Baseband Software using Comparative   |
| [6]                       | Analysis based on Cellular Specifications  |
| [3]                       | KR 10-2021-0136352 Oct 2021  |
|                           | METHOD FOR PREVENTING MAPPING OF USER IDENTIFIERS IN MOBILE COMMUNICATION SYSTEM AND THE SYSTEM THEREOF  |
| [4]                       | KR 10-2021-0040795 Mar 2021  |
| [=]                       | ANALYSIS SYSTEM FOR DETECTION OF SIP IN Volte AND THE METHOD THEREOF   |
| [5]                       | KR 10-2020-0177062 Dec 2020  |
| [-]                       | Analysis method for detection of SIP implementation vulnerability in VoLTE   |
| [6]                       | KR 10-2020-0133926 Oct 2020  |
|                           | Method to prevent mapping of user identifiers in mobile communication system   |
| [7]                       | KR 10-2020-0133925 Oct 2020  |
|                           | APPARATUS AND METHOD FOR VIDEO TITLE IDENTIFICATION OF MOBILE COMMUNICATION  |
|                           | NETWORK USING ENCRYPTED TRAFFIC MONITORING   |
| [8]                       | KR 10-2019-0005131 Jan 2019  |
|                           | Large-scale honeypot system IoT botnet analysis  |
| [9]                       | KR 10-2018-0036403 Mar 2018  |
| [4.0]                     | Dynamic analysis method for malicious embedded firmware detection  |
| [10]                      | KR 10-2018-0036055 Mar 2018  |
| [11]                      | Emulation based security analysis method for embedded devices  We 10 2018 0027201  |
| [11]                      | KR 10-2018-0037291 Mar 2018<br>Binary-Level Virtual Function Call Protection Method by Saving Type Information   |
| [19]                      | KR 10-2018-0034616 Mar 2018  |
| [ + 4 ]                   | ARCHITECTURE-INDEPENDENT SIMILARITY MEASURING METHOD FOR PROGRAM FUNCTION  |

## PUBLICATIONS (INTERNATIONAL)

(\*: co-first authors)

[1] BaseComp: A Comparative Analysis for Integrity Protection in Cellular Baseband Software

Eunsoo Kim\*, Min Woo Baek\*, CheolJun Park, **Dongkwan Kim**, Yongdae Kim, and Insu Yun Proceedings of the 32nd USENIX Security Symposium (Security'23)

Acceptance rate: 29.22% (422 of 1,444)

Aug 2023

- [2] Un-Rocking Drones: Foundations of Acoustic Injection Attacks and Recovery Thereof
  Jinseob Jung, <u>Dongkwan Kim</u>, Joonha Jang, Juhwan Noh, Changhun Song, and Yongdae Kim
  Proceedings of the 2023 Annual Network and Distributed System Security Symposium (NDSS'23)
  Acceptance rate: 16.18% (94 of 581)

  Mar 2023
- [3] Paralyzing Drones via EMI Signal Injection on Sensory Communication Channels
   Junha Jang, ManGi Cho, Jaehoon Kim, <u>Dongkwan Kim</u>, and Yongdae Kim
   Proceedings of the 2023 Annual Network and Distributed System Security Symposium (NDSS'23)
   Acceptance rate: 16.18% (94 of 581)

  Mar 2023
- [4] Watching the Watchers: Practical Video Identification Attack in LTE Networks Sangwook Bae, Mincheol Son, <u>Dongkwan Kim</u>, CheolJun Park, Jiho Lee, Sooel Son, and Yongdae Kim Proceedings of the 31st USENIX Security Symposium (Security'22) Acceptance rate: 18.10% (256 of 1,414)
  Aug 2022
- [5] Revisiting Binary Code Similarity Analysis using Interpretable Feature Engineering and Lessons Learned

<u>Dongkwan Kim</u>, Eunsoo Kim, Sang Kil Cha, Sooel Son, and Yongdae Kim IEEE Transactions on Software Engineering (TSE'22)

Jul 2022

[6] Improving Large-Scale Vulnerability Analysis of IoT Devices with Heuristics and Binary Code Similarity

Dongkwan Kim

Ph.D. Thesis, KAIST

Daejeon, South Korea, Feb 2022

[7] Enabling the Large-Scale Emulation of Internet of Things Firmware With Heuristic Workarounds

<u>Dongkwan Kim</u>, Eunsoo Kim, Mingeun Kim, Yeongjin Jang, and Yongdae Kim IEEE Security & Privacy

May 2021

[8] BaseSpec: Comparative Analysis of Baseband Software and Cellular Specifications for L3 Protocols

<u>Dongkwan Kim\*</u>, Eunsoo Kim\*, CheolJun Park, Insu Yun, and Yongdae Kim Proceedings of the 2021 Annual Network and Distributed System Security Symposium (NDSS'21) Acceptance rate: 15.18% (87 of 573)

[9] FirmAE: Towards Large-Scale Emulation of IoT Firmware for Dynamic Analysis Mingeun Kim, <u>Dongkwan Kim</u>, Eunsoo Kim, Suryeon Kim, Yeongjin Jang, and Yongdae Kim Proceedings of the 2020 Annual Computer Security Applications Conference (ACSAC'20) Acceptance rate: 23.18% (70 of 302)
Virtual, Dec 2020

[10] Who Spent My EOS? On the (In)Security of Resource Management of EOS.IO

Sangsup Lee, Daejun Kim,  $\underline{\mathbf{Dongkwan\ Kim}}$ , Sooel Son, and Yongdae Kim

Proceedings of the 13th USENIX Workshop on Offensive Technologies  $\,$ 

(WOOT'19)

Santa Clara, CA, Aug 2019

#### [11] Peeking over the Cellular Walled Gardens - A Method for Closed Network Diagnosis

Byeongdo Hong, Shinjo Park, Hongil Kim, <u>Dongkwan Kim</u>, Hyunwook Hong, Hyunwoo Choi, Jean-Pierre Seifert, Sung-Ju Lee, and Yongdae Kim

IEEE Transactions on Mobile Computing (TMC'18)

Feb 2018

## [12] When Cellular Networks Met IPv6: Security Problems of Middleboxes in IPv6 Cellular Networks

Hyunwook Hong, Hyunwoo Choi,  $\underline{\mathbf{Dongkwan\ Kim}}$ , Hongil Kim, Byeongdo Hong, Jiseong Noh, and Yongdae Kim

Proceedings of the 2nd IEEE European Symposium on Security and Privacy (EuroS&P'17)

Acceptance rate: 19.58% (38 of 194)

Paris, France, Apr 2017

#### [13] Pay As You Want: Bypassing Charging System in Operational Cellular Networks

Hyunwook Hong, Hongil Kim, Byeongdo Hong, **Dongkwan Kim**, Hyunwoo Choi, Eunkyu Lee, and Yongdae Kim

Proceedings of the 17th International Workshop on Information Security Applications

(WISA'16)

Jeju, South Korea, Aug 2016

## [14] Dissecting VoLTE: Exploiting Free Data Channels and Security Problems Dongkwan Kim

M.S. Thesis, KAIST

Daejeon, South Korea, Feb 2016

## [15] Breaking and Fixing VoLTE: Exploiting Hidden Data Channels and Mis-implementations <u>Dongkwan Kim\*</u>, Hongil Kim\*, Minhee Kwon, Hyungseok Han, Yeongjin Jang, Dongsu Han, Taesoo Kim,

and Yongdae Kim

Proceedings of the 22nd ACM Conference on Computer and Communications Security (CCS'15)

Acceptance rate: 19.81% (128 of 646)

Denver, CO, Oct 2015

#### [16] BurnFit: Analyzing and Exploiting Wearable Devices

Dongkwan Kim, Suwan Park, Kibum Choi, and Yongdae Kim

Proceedings of the 16th International Workshop on Information Security Applications (WISA'15)

Best Paper Award

Jeju, South Korea, Aug 2015

#### [17] Rocking Drones with Intentional Sound Noise on Gyroscopic Sensors

Yunmok Son, Hocheol Shin, **Dongkwan Kim**, Youngseok Park, Juhwan Noh, Kibum Choi, Jungwoo Choi, and Yongdae Kim

Proceedings of the 24th USENIX Security Symposium (Security'15)

Acceptance rate: 15.73% (67 of 426)

Austin, TX, Aug 2015

#### [18] Analyzing Security of Korean USIM-based PKI Certificate Service

Shinjo Park, Suwan Park, Insu Yun, Dongkwan Kim, and Yongdae Kim

Proceedings of the 15th International Workshop on Information Security Applications

(WISA'14)

Jeju, South Korea, Aug 2014

## [19] High-speed Automatic Segmentation of Intravascular Stent Struts in Optical Coherence Tomography Images

Myounghee Han,  $\underline{\mathbf{Dongkwan}}$   $\underline{\mathbf{Kim}}$ , Wang-Yuhl Oh, and Sukyoung Ryu

## Publications (Domestic, South Korea)

#### [20] Video Service Identification Attack in LTE by Monitoring Encrypted Traffic

Mincheol Son, Sangwook Bae, <u>Dongkwan Kim</u>, Jiho Lee, CheolJun Park, BeomSeok Oh, Sooel Son, and Yongdae Kim

Proceedings of Symposium of the Korean Institute of Communications and Information Sciences (KCIS'21)

Virtual, Jun 2021

### [21] Standard-based User Identifier Mapping Attack Prevention Method for LTE Network

CheolJun Park, Sangwook Bae, Jiho Lee, Mincheol Son, <u>Dongkwan Kim</u>, Sooel Son, and Yongdae Kim Conference on Information Security and Cryptography Winter (CISC-W'20)

Best Paper Award South Korea, Nov 2020

#### [22] VolteFuzz: Framework for Comprehensive Analysis of SIP in Volte

Seokbin Yun, Sangwook Bae, Mincheol Son, **Dongkwan Kim**, Jiho Lee, CheolJun Park, Yeongbin Hwang, and Yongdae Kim

Conference on Information Security and Cryptography Winter (CISC-W'20) South Korea, Nov 2020

#### [23] Firm-Pot: Large-scale Firmware Honey-Pot for Malware Analysis

Minguen Kim, Eunsoo Kim,  $\underline{\mathbf{Dongkwan\ Kim}}$ , and Yongdae Kim

Conference on Information Security and Cryptography Winter (CISC-W'18) South Korea, Dec 2018

#### [24] TVT: Typed Virtual Table for Mitigating VTable Hijacking

Jeongoh Kyea, Eunsoo Kim, Dongkwan Kim, and Yongdae Kim

Conference on Information Security and Cryptography Winter (CISC-W'17) South Korea, Dec 2017

#### [25] Design and Implementation of GPS Spoofer Software

Juhwan Noh, Dongkwan Kim, and Yongdae Kim

Conference on Information Security and Cryptography Summer (CISC-S'15) South Korea, Jun 2015

#### [26] Security Analysis of USIM-based certificate service in Korea

Shinjo Park, Suwan Park, Insu Yun, Dongkwan Kim, and Yongdae Kim

Conference on Information Security and Cryptography Summer (CISC-S'14)

South Korea, Jun 2014

#### [27] Security Analysis of Femtocells in Korea

Eunsoo Kim, Dongkwan Kim, Youjin Lee, Shinjo Park, and Yongdae Kim

Conference on Information Security and Cryptography Summer (CISC-S'14) South Korea, Jun 2014

#### INVITED TALKS

# AI Security Primer: Red Team Perspectives on Navigating New Threats and Safeguarding AI Frontier

Special Lecture for Hyundai Motors Group Security Center Seoul, South Korea, Jan 2025
3rd Workshop of IT Platform Security Research Group by Korea Institute of Information Security & Cryptology (KIISC)
Seoul, South Korea, Nov 2024

Special Lecture for SungSungshin Women's University

Seoul, South Korea, Oct 2024
Special Lecture for SK Telecom Security Team

Seoul, South Korea, Jul 2024
SIS 2024: MERGE conference by S2W

Seoul, South Korea, Jul 2024
.HACK Conference by Theori

Seoul, South Korea, May 2024

## Scaling up Vulnerability Analysis of IoT Devices with Heuristics and Binary Code Similarity

Technology Exchange Meeting between Samsung Mobile Security Team and Hyundai Motor Company Vehicle
Cyber Security Team Seoul, South Korea, Jul 2024
Special Lecture for Kyung Hee University Yongin, South Korea, Aug 2024
Colloquium at School of Cybersecurity, Korea University Seoul, South Korea, Oct 2023

#### Peeking over Industry's Patch Gap: Case Study of Samsung SmartTV's Web Browser

KAIST-Samsung SDS Tech Seminar

Daejeon, South Korea, Mar 2023

## BaseSpec: Comparative Analysis of Baseband Software and Cellular Specifications for L3 Protocols

Annual Network and Distributed System Security Symposium

Virtual, Feb 2021

KAIST-CISPA Workshop

Seoul, South Korea, Aug 2019

## Breaking and Fixing VoLTE: Exploiting Hidden Data Channels and Mis-implementations A.k.a. Dissecting VoLTE: Exploiting Free Data Channels and Security Problems

| GSMA RCS/VoLTE Security Regulatory workshop                  | Toronto, Canada, Sep 2016      |
|--|--------------------------------|
| A3 Foresight Program Annual Workshop                         | Okinawa, Japan, Feb 2016       |
| Chaos Communication Congress (CCC) Conference (32C3)         | Hamburg, Germany, Dec 2015     |
| National Security Research Institute                         | Daejeon, South Korea, Nov 2015 |
| Power of Community (PoC) Conference                          | Seoul, South Korea, Nov 2015   |
| ACM Conference on Computer and Communications Security (CCS) | Denver, CO, Oct 2015           |
| Seminar at the Georgia Institute of Technology               | Atlanta, GA, Oct 2015          |

#### BurnFit: Analyzing and Exploiting Wearable Devices

16th WISA Jeju, South Korea, Aug 2015

#### International CTF Challenge Solving

NetSec-KR Seoul, South Korea, Apr 2013

#### PROFESSIONAL ACTIVITIES

| Secondary Reviewer (Security)  |                              |
|--|------------------------------|
| IEEE Symposium on Security and Privacy (Oakland)                               | 2021                         |
| USENIX Security Symposium (Security)   | 2019-2021                    |
| Network and Distributed System Security Symposium (NDSS)                       | $2017 – 2018, \ 2020 – 2021$ |
| ACM Conference on Computer and Communications Security (CCS)                   | 2017, 2019-2021              |
| IEEE European Symposium on Security and Privacy (EuroS&P)                      | 2016,2018,2020               |
| ACM ASIA Conference on Computer and Communications Security (ASIACCS)          | $2016 – 2017, \ 2019 – 2020$ |
| The WEB Conference (WWW)   | 2018, 2020                   |
| International Symposium on Research in Attacks, Intrusions and Defenses (RAID) | 2017                         |
| IEEE Symposium on Privacy-Aware Computing (PAC)                                | 2017                         |
| Secondary Reviewer (System)  |                              |
| ACM Symposium on Operating Systems Principles (SOSP)                           | 2019                         |

## **External Security Consultant**

KAIST Computer Emergency Response Team

Symposium on Operating Systems Design and Implementation (OSDI)

 $Sep\ 2010-Feb\ 2022$ 

2016

### PARTICIPATED PROJECTS

(\*: participated as a project leader) **Industrial Projects** [1] An Industry-academia Task with Samsung Electronics Device Solu-Jun 2020 – Aug 2020 tions Business · Samsung Electronics [2] \*Organizing 2018 Samsung Capture-the-flag (SCTF) Apr 2018 - Oct 2018 · Samsung Electronics [3] \*Organizing 2017 Samsung Capture-the-flag (SCTF) Dec 2016 - Dec 2017 · Samsung Electronics [4] A Study on the Security Vulnerability Analysis and Response Aug 2016 - Jul 2017 Method of LTE Networks · SK Telecom [5] A Security Vulnerability Analysis of Smartcar Core Modules Jul 2016 - Jun 2017 · Hvundai NGV [6] A Study on the Security Analysis and Response Method of LTE Aug 2015 - Apr 2016 Networks · SK Telecom Feb 2014 - Dec 2015 [7] A Security Analysis of Samsung SmartTV 2014 · Samsung Electronics International Projects [1] \*Cyber Physical Analysis of System Software Survivability by Stim-Jun 2020 - Feb 2022 ulating Sensors on Drones · Air Force Office of Scientific Research (AFOSR), Air Force Research Laboratory (AFRL) Governmental Projects [1] \*A Study on the Android-based Security Analysis Technology May 2020 - Dec 2020 · National Security Research (NSR) Jul 2017 - Jun 2019 [2] A Study on the Security of Random Number Generator and Embedded Devices · Institute for Information & Communications Technology Planning & Evaluation (IITP) [3] \*A Study on the Firmware Emulation Technology for Linux-based May 2017 - Oct 2017 Routers · NSR [4] A Development of Automated Reverse Engineering and Vulnerability Apr 2016 - Dec 2018 Detection Base Technology through Binary Code Analysis [5] \*A CAPTCHA Design based on Human Perception Characteristics Apr 2016 - Dec 2016 · KAIST [6] \*A Study on the Vulnerability Analysis Method of Domes-Apr 2015 – Nov 2015 tic/International Smartcars NSR. [7] A Study on the Analysis of Technology and Security Threats in LTE Sep 2013 - Jan 2014 **Femtocell** · Korea Internet & Security Agency (KISA) [8] A Study on the Analysis and Response Method of Vulnerabilities in Mar 2013 - Dec 2013 **Network Devices** · NSR

Apr 2011 - Oct 2011

[9] A Study on the Vulnerability Analysis of Network Devices

· NSR

## OTHER ACTIVITIES

| [1] | Teaching Assistant, Introduction to Electronics Design Lab.      | Fall 2019             |
|-----|--|-----------------------|
|     | (EE305), KAIST   |                       |
| [2] | Teaching Assistant, Discrete Methods for Electrical Engineering  | Spring 2017           |
|     | (EE213), KAIST   |                       |
| [3] | Teaching Assistant, Network Programming (EE324), KAIST           | Fall 2016             |
| [4] | Teaching Assistant, Cryptography Engineering (EE817/IS893),      | Spring 2016           |
|     | KAIST  |                       |
| [5] | Teaching Assistant, Security 101: Think Like an Adversary        | Fall 2015             |
|     | (EE515/IS523), KAIST   |                       |
| [6] | Student Representative of School of Computing, KAIST             | Feb $2011 - Dec 2013$ |
| [7] | Head Instructor, Information Security 101 for Freshmen (HSS062), | Sep 2011 - Feb 2013   |
|     | KAIST  |                       |
| [8] | Teaching Assistant, Information Security 101 for Freshmen        | Sep 2010 - Aug 2011   |
|     | (HSS062), KAIST  |                       |

## LIST OF REFERENCES

#### [1] Dr. Yongdae Kim

Director, Cyber Security Research Center (CSRC), KAIST

Professor, School of Electrical Engineering and Graduate School of Information Security, KAIST

Email: yongdaek@kaist.ac.kr

Homepage: https://syssec.kaist.ac.kr/~yongdaek/

#### [2] Dr. Taesoo Kim

Professor, School of Cybersecurity and Privacy (SCP) and Computer Science (SCS), Georgia Tech

 ${\bf Email:\ tae soo@gatech.edu}$ 

Homepage: https://taesoo.kim/

### [3] Dr. Sang Kil Cha

Director, Cyber Security Research Center (CSRC), KAIST

Associate Professor, School of Computing and Graduate School of Information Security, KAIST

Email: sangkilc@kaist.ac.kr

Homepage: https://softsec.kaist.ac.kr/~sangkilc/

#### [4] Dr. Sooel Son

Associate Professor, School of Computing and Graduate School of Information Security, KAIST

Email: sl.son@kaist.ac.kr

Homepage: https://sites.google.com/site/ssonkaist/

#### [5] Dr. Yeongjin Jang

Principal Software Engineer, Samsung Research America

 ${\bf Email:\ y.jang 1@samsung.com}$ 

Homepage: https://www.unexploitable.systems/

#### [6] Dr. Insu Yun

Associate Professor, School of Electrical Engineering, KAIST

Email: insuyun@kaist.ac.kr

Homepage: https://insuyun.github.io/