

Yoonkyo Jung

Assistant Professor · Prosepective Ph.D student

575, Danjae-ro, Cheongju-si, Chungcheongbuk-do, Republic of Korea

✉ ykjung.rokafa@gmail.com | 🏠 yoonkyo.info | 📷 yoonkyo | 📺 yoonkyo

Education

Seoul National University (SNU)

M.S. in Computer Science and Engineering

- Network Convergence & Security Laboratory
- Advisor: Ted “Taekyoung” Kwon

Seoul, Republic of Korea

Mar. 2019 - Feb. 2021

Republic of Korea Air Force Academy (ROKafa)

B.S. in System Engineering

Cheongju, Republic of Korea

Mar. 2013 - Feb. 2017

Publication

<Journal>

Reliability Analysis of Privacy Policies Using Android Static Analysis

2023

Yoonkyo Jung

KIPS Transactions on Computer and Communication Systems, Vol.12, No.1

Design of Surveillance Device Control System Using Audio Beamforming

2022

Jaesung Sim, Yoonkyo Jung

Journal of Military Science Research, Vol.73, No.2

Development and Performance Evaluation of Chatbot System for Office Automation

2022

Yoonkyo Jung

Asia-pacific Journal of Convergent Research Interchange, Vol.8, No.10

<Conference>

Development of Multi-copter Propeller Distortion Measurement Device Using Three-side Image Analysis

2022

Songhyeon Kim, Jaesung Sim, Yoonkyo Jung

KIISE Korea Computer Congress

A Study on the Development and Performance Improvement of Chatbot for Office Automation

2022

Junsoo Park, Youngjun kim, Yoonkyo Jung

KIICE Spring Conference

Android Remote Unlocking Service using Synthetic Password: A Hardware Security-preserving Approach

2021

Sungmin Lee, Yoonkyo Jung, Jaehyun Lee, Byoungyoung Lee, Ted “Taekyoung” Kwon

IEEE Secure Development Conference (SecDev)

Experience

Omniuous. Co., Ltd.

Software Architect

Seoul, S.Korea

Feb. 2019 - Jan. 2021

Air Defense Missile Command, ROKAF

Radar Maintenance officer

- Maintained Ballistic Missile Early-warning Radar as a maintenance team leader

Osan, Republic of Korea

April. 2018 - Jan. 2019

Education and Training Command, ROKAF

Recruit Training Officer

Jinju, Republic of Korea

Mar. 2017 - Mar. 2018

PLAT Corp.

Co-founder & Software Engineer

Seoul, S.Korea

Jan. 2016 - Jun. 2017

- Implemented RESTful API server for car rental booking application(CARPLAT in Google Play).
- Built and deployed overall service infrastructure utilizing Docker container, CircleCI, and several AWS stack(Including EC2, ECS, Route 53, S3, CloudFront, RDS, ElastiCache, IAM), focusing on high-availability, fault tolerance, and auto-scaling.
- Developed an easy-to-use Payment module which connects to major PG(Payment Gateway) companies in Korea.

R.O.K Cyber Command, MND

Software Engineer & Security Researcher (Compulsory Military Service)

Seoul, S.Korea

Aug. 2014 - Apr. 2016

- Lead engineer on agent-less backtracking system that can discover client device's fingerprint(including public and private IP) independently of the Proxy, VPN and NAT.
- Implemented a distributed web stress test tool with high anonymity.
- Implemented a military cooperation system which is web based real time messenger in Scala on Lift.

NEXON

Game Developer Intern at Global Internship Program

Seoul, S.Korea & LA, U.S.A

Jan. 2013 - Feb. 2013

- Developed in Cocos2d-x an action puzzle game(Dragon Buster) targeting U.S. market.
- Implemented API server which is communicating with game client and In-App Store, along with two other team members who wrote the game logic and designed game graphics.
- Won the 2nd prize in final evaluation.

ShitOne Corp.

Software Engineer

Seoul, S.Korea

Dec. 2011 - Feb. 2012

- Developed a proxy drive smartphone application which connects proxy driver and customer.
- Implemented overall Android application logic and wrote API server for community service, along with lead engineer who designed bidding protocol on raw socket and implemented API server for bidding.

SAMSUNG Electronics

Freelance Penetration Tester

S.Korea

Sep. 2013, Mar. 2011 - Oct. 2011

- Conducted penetration testing on SAMSUNG KNOX, which is solution for enterprise mobile security.
- Conducted penetration testing on SAMSUNG Smart TV.

Teaching

Republic of Korea Air Force Academy

Assistant Professor

Cheongju, Republic of Korea

Feb. 2021 - now

- 2023 Fall: Data Communication, Hacking and Defense, Convergence Capstone Design
- 2023 Spring: Network Programming, Embedded System, Convergence Capstone Design
- 2022 Fall: Hacking and Defense
- 2022 Spring: Embedded System
- 2021 Fall: Software Programming, Data Structure, Hacking and Defense
- 2021 Spring: Software Programming, Embedded System

Seoul National University

Teaching Assistant

Seoul, Republic of Korea

April. 2018 - Jan. 2019

- 2020 Fall: Internet Security and Privacy

Honors & Awards

International

- | | | |
|------|---|-------------------------|
| 2018 | Finalist , DEFCON 26th CTF Hacking Competition World Final | <i>Las Vegas, U.S.A</i> |
| 2017 | Finalist , DEFCON 25th CTF Hacking Competition World Final | <i>Las Vegas, U.S.A</i> |
| 2014 | Finalist , DEFCON 22nd CTF Hacking Competition World Final | <i>Las Vegas, U.S.A</i> |
| 2013 | Finalist , DEFCON 21st CTF Hacking Competition World Final | <i>Las Vegas, U.S.A</i> |
| 2011 | Finalist , DEFCON 19th CTF Hacking Competition World Final | <i>Las Vegas, U.S.A</i> |

Domestic

2015 **3rd Place**, WITHCON Hacking Competition Final
2017 **Silver Prize**, KISA HDCON Hacking Competition Final
2013 **Silver Prize**, KISA HDCON Hacking Competition Final

Seoul, S.Korea
Seoul, S.Korea
Seoul, S.Korea

Presentation

DevFest Seoul by Google Developer Group Korea

Seoul, S.Korea

Presenter for <Hosting Web Application for Free utilizing GitHub, Netlify and CloudFlare>

Nov. 2017

- Introduced the history of web technology and the JAM stack which is for the modern web application development.
- Introduced how to freely host the web application with high performance utilizing global CDN services.

6th CodeEngn (Reverse Engineering Conference)

Seoul, S.Korea

Presenter for <DEFCON 20th : The way to go to Las Vegas>

Jul. 2012

- Introduced CTF(Capture the Flag) hacking competition and advanced techniques and strategy for CTF

Writing

A Guide for Developers in Start-up

Facebook Page

Founder & Writer

Jan. 2015 - PRESENT

- Drafted daily news for developers in Korea about IT technologies, issues about start-up.

Program Committees

2016 **Problem Writer**, 2016 CODEGATE Hacking Competition World Final
2013 **Organizer & Co-director**, 1st POSTECH Hackathon

S.Korea
S.Korea

Extracurricular Activity

PoApper (Developers' Network of POSTECH)

Pohang, S.Korea

Core Member & President at 2013

Jun. 2010 - Jun. 2017

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

PLUS (Laboratory for UNIX Security in POSTECH)

Pohang, S.Korea

Member

Sep. 2010 - Oct. 2011

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.