# **Hyeong-Jin Park**

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**INTERESTS** 

Security, AI with Deep Learning, Block Chain.

**EDUCATION** 

Chonbuk National University, Korea

Mar 2008 – Aug 2014

- Bachelor of Computer Sicence and Engineering
- Graduated with Outstanding Graduate Award (ranked 1st in project contest and algorithm contest)

**SKILLS** 

Programming/Scripting Languages: (Proficient) C, C++, Java, Python, Bash; Go, Solidity, SQL, Javascript Frameworks and tools

- Keras, Theano, Tensorflow, Caffe for Deep Learning
- Bootloader, Baseband, TEE (Trusted Environments Execution), Framework, NDK, ART, LLVM for Android
- IDA, Ollydbg, Apktool, Jadx for Reversing
- Burp Suite, Fiddler for Web Hacking
- Fortify, Androguard for Security Analysis
- AFL, honggfuzz For Fuzzing

INDUSTRY EXPERIENCE

### Samsung Electronics, Suwon, South Korea

Jul 2014 - Present

Mobile Security Technology Group (Samsung Mobile), Suwon, South Korea

Jan 2016 - Present

Security Research Engineer

### **Product Security Incident Response Team (PSIRT)**

• Operating the official Samsung Mobile Security Rewards Program (also knwon as bug bounty program) rewarding up to \$ 200,000 for security vulnerabilities of Samsung Mobile devices and services.

(https://security.samsungmobile.com/main.smsb).

• Proficient use of Reverse Engineering, Fuzzing and Exploiting technologies to perform security risk assessment for "Kernel, TEE, Framework, Application etc. in all Samsung Mobile devices".

# Samsung Electronics Security Expert Research Group

• Share security issues of all Samsung Electronics products such as mobile, TV, and semi-conductors, and discover new security items.

## Frontier Research Lab (Samsung Research), Suwon, South Korea

Jul 2014 - Dec 2015

Research Engineer

- Implemented malware detection system on Android devices using deep learning.
- Analyzed large dataset of Android applications to identify and statistically correlate key malware characteristics from dex file, native libraries, and (hidden) scripts or image files.
- Research of AOT (Ahead Of Time comilation) complier technique to convert the Android application to Tizen application.
- Implementation of indoor autonomous mobile robot based on ROS (Robot Operating System).
- · Implementation of drone algorithm to follow recorded face by using video-based machine learning.

## Samsung Software Membership, Jeonju, South Korea

Jul 2012 - Jul 2014

Software Engineer

- Development and testing of image processing algorithm for gesture recognition (with Samsung Research)
- Implemented diverse projects using various technologies such as image processing, EEG signal analysis, and motor control.

RESEARCH Hyeong-Jin Park. 2018. Behavior-Based Automatic Malware Detection System using Deep Learning.

EXPERIENCE - In the 2018 Samsung Conference (for Samsung researchers only).

PATENTS Malware detection system using static code analysis and probabilistic model - US16/068263 (2018.07.05)

Electronic Apparatus for detecting Malware and Method thereof - KR/10-2016-0072230 (2016.06.10)

EXTRACURRICULAR Sentinel Protocol Cyber Security Expert (<a href="https://forum.sentinelprotocol.io/">https://forum.sentinelprotocol.io/</a>)

ACTIVITIES RSK Ambassador at South Korea (https://www.rsk.co/)