JunWei Song

Security Engineer

Contact

 Taiwan

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 https://github.com/krnick

 /krnick

Education

National University of Kaohsiung, Master in Information Management, 2020

Public Speaking

HITBSecConf

HITB Armory, AMS, 2020. (URL)

Europython 2020 (URL)

PyCon TW/KR/MY 2019 (URL)

Personal Profile

JunWei is a Security Researcher from Taiwan. A paranoid Pythonista who focuses on cybersecurity, reverse engineering, and malware analysis. And as a CPython contributor, PyCon TW Review Board, presented at HITBSecConf, Europython, PyCon Taiwan, PyCon Korea, PyCon Malaysia. He's the co-founder of Quark-Engine and a security research group, TWBGC.

Work Experience

Telecom Technology Center, Taiwan, Security Engineer

October 2018 - Now (1.5 years) - working during master's degree

Develop an Android malware scoring system from zero to one, as Lead Developer, in charge of Quark core function design, program development, program testing, documentation writing. Communicate and coordinate with team members, and cooperate through Gitflow. Also actively promote this project to train new members.

Dowton Electronic Materials, Taiwan, Independent Contractor for network infrastructure

March 2017 - June 2017 (3 months) - working during college

Galaxy Software Services Corporation, Taiwan, Web Development Intern

July 2016 - August 2016 (2 months) - working during college

Security Research

CVE-2019-9674: zip bomb in Python zipfile module.

Technical Blog

CPython-internals

Analysis of CPython interpreter implementation principles and CPython source code analysis.

Books Reviewer

- 職業駭客的修練：機械碼與底層的把玩藝術

- 職業駭客的告白II部曲：Python和Ruby啟發式程式語言的秘密

- 職業駭客的告白III部曲：C語言、組合語言與逆向工程的秘密

- 駭客的修練：使用IDA Pro進行底層分析

PyCon Community

- PyCon Taiwan Program Committee since 2020
- PyCon Taiwan Review Board since 2020

Authored Open-Source Projects

Quark-Engine An Obfuscation-Neglect Android Malware Scoring System.

sunzip a Python package, providing secure unzip against zip bomb.

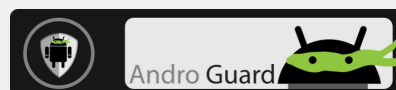**gwalstat-bot** A bot for checking github pull requests.

Open-Source Contributions

CPython

- 1. Find the Zip Bomb vulnerability and successfully apply for a CVE number in Python zipfile module.

- 2. Writing zipfile module decompression pitfalls in Python official documentation.

Androguard

- 1. Add a new feature in the Androguard module, allowing users to query the Android APIs usage from given APK.

- 2. Provide an example to allows users to query the decompilation instruction set corresponding to a specific function.

- 3. Solve the problem of dependency packages and remind users in official documentation.