

# CCS Lab Internship opportunity

## 1. Summary

- Research Topic: Detecting 1-day vulnerability using binary code clone detection technique
- Advisor: Prof. Heejo Lee
- Working Period: 2 months (September ~ October 2021, can be extended)
- Required people: 1 person
  - Certain amount of wage as a lab intern will be provided

## 2. Work description

- Generate vulnerability signature for QuickBCC framework with compiled vulnerable binary code and patched binary code
  - Building(compiling) a vulnerable version and its patched version of program source code
  - Diffing two (vulnerable, patched) version of compiled binary code using IDA
  - Generating signature applicable for QuickBCC Framework
    - Reference: [https://ccs.korea.ac.kr/pds/SEC21\\_Jang.pdf](https://ccs.korea.ac.kr/pds/SEC21_Jang.pdf)
    - More details will be given

## 3. Requirements

- Understanding of program build process (Makefile, Cross-compile, and so on)
- Understanding of what is an assembly code (architecture does not matter!)
- Basic Git skills to build a project with given version
- Smooth communication!

## 4. Contact

Please contact Geonwoo Lee ([gnu@korea.ac.kr](mailto:gnu@korea.ac.kr)) if interested.