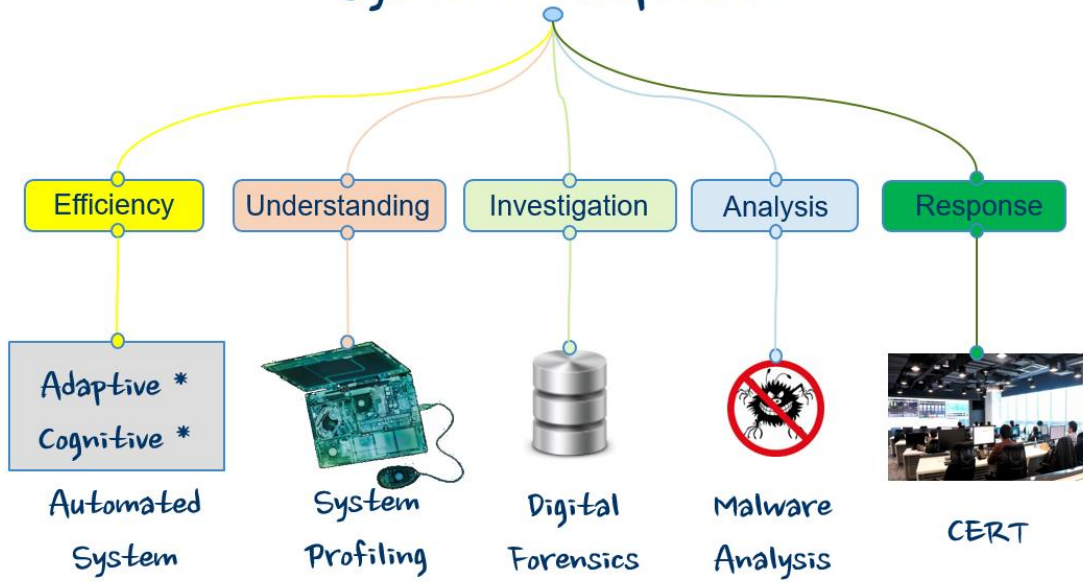


# WANTED

We are looking for a highly motivated, skilled individual, who is passionate about system security to work as a researcher (Undergraduate, MS course, Ph.D course).

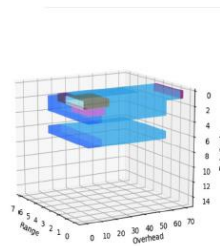
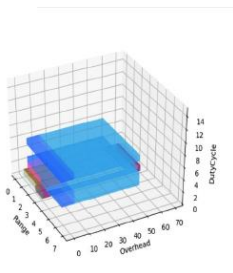
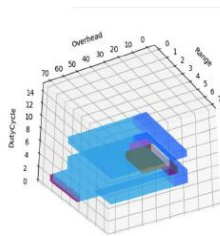
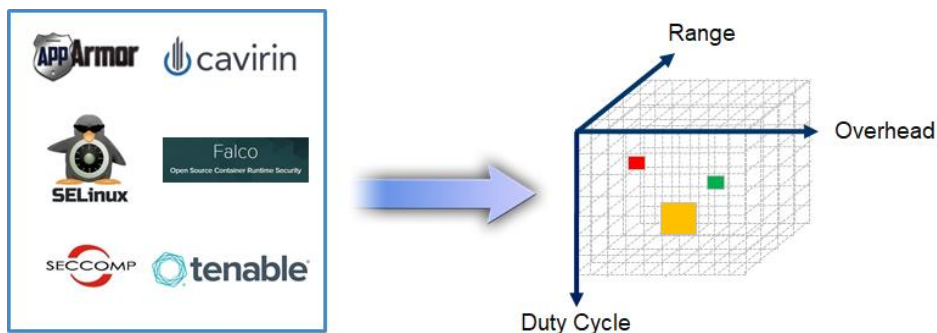
The successful candidate will be working on a number of interesting research projects as well as the actual system implementation and subsequent evaluation and experiments in real computing systems.

# System Intrrospection



# Pooling Monitoring Tools

- ❖ The world is big. There are a lot of tools to monitor a computing system. But, there is nothing to have all the benefits.

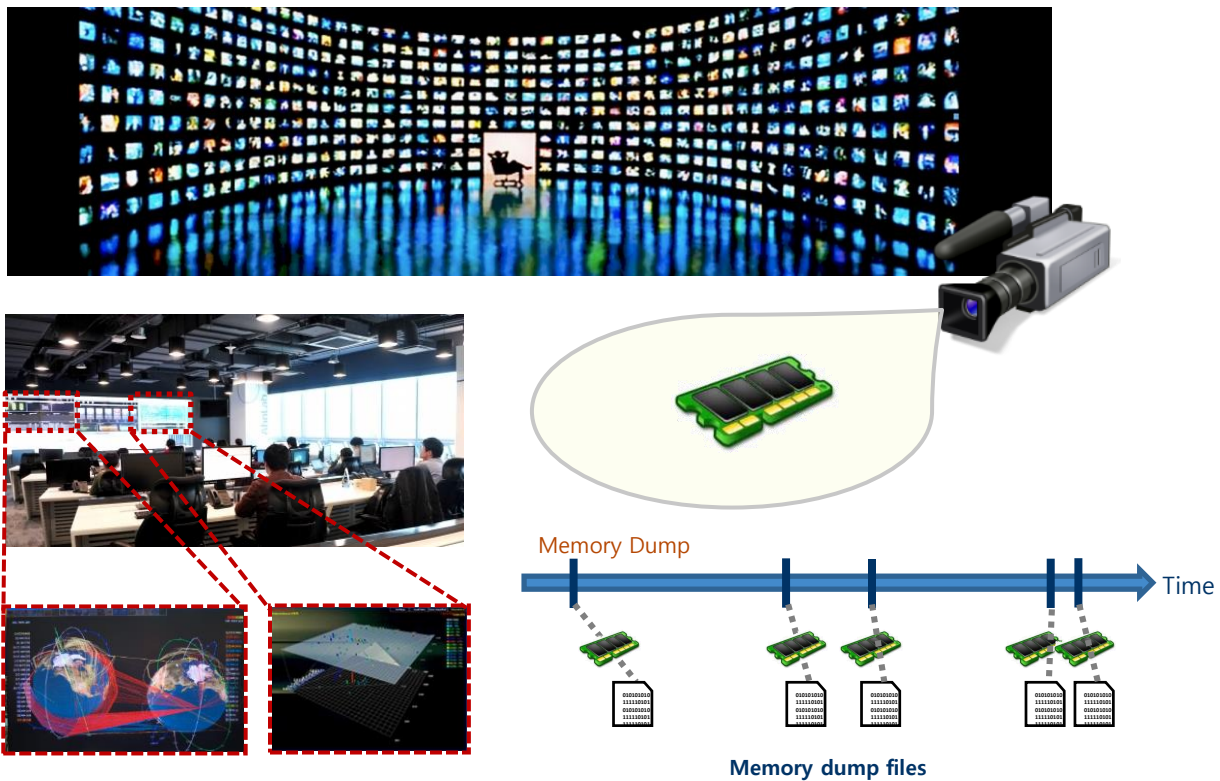


# Case Study: Toward Software-Defined Monitoring



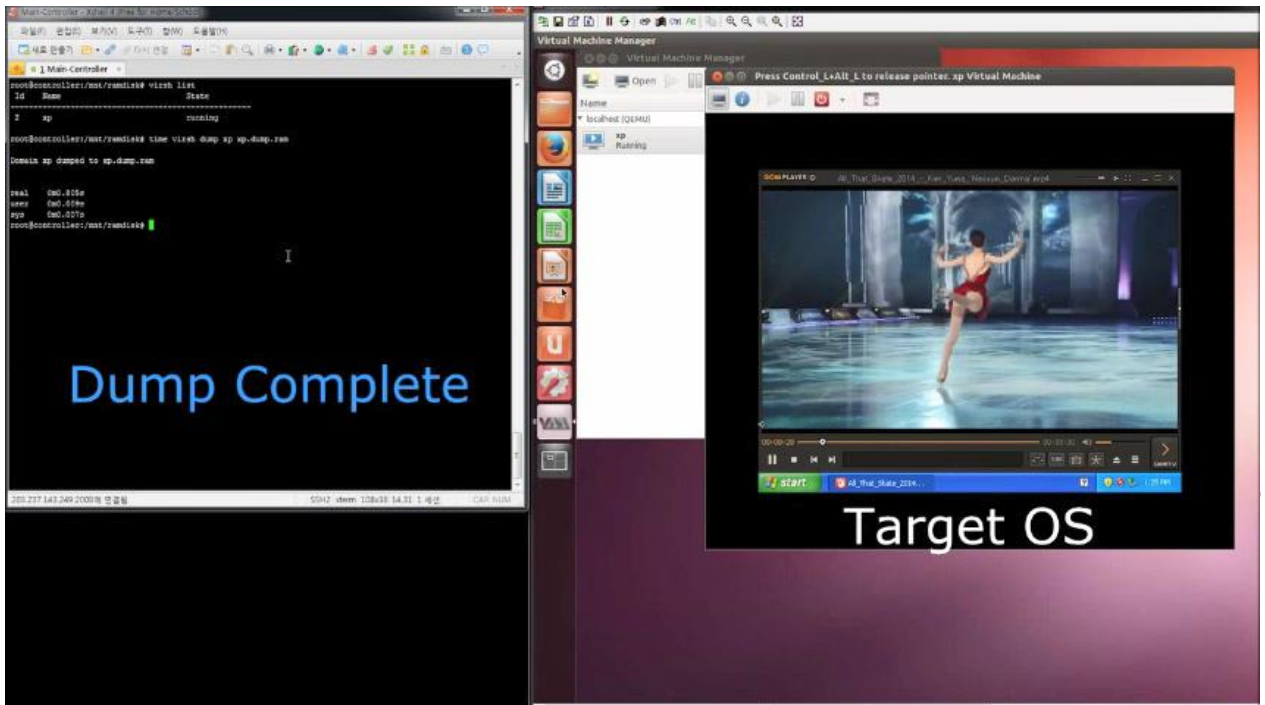
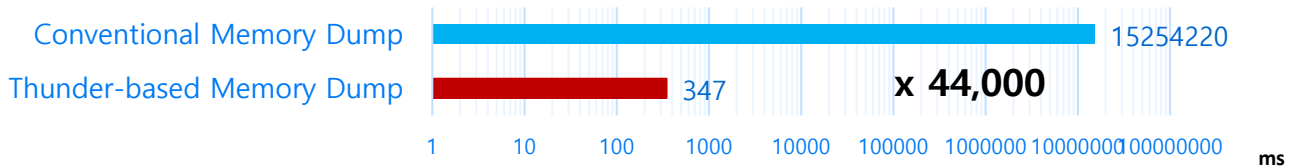


# CERT enhanced with Super-Fast Memory Dumping

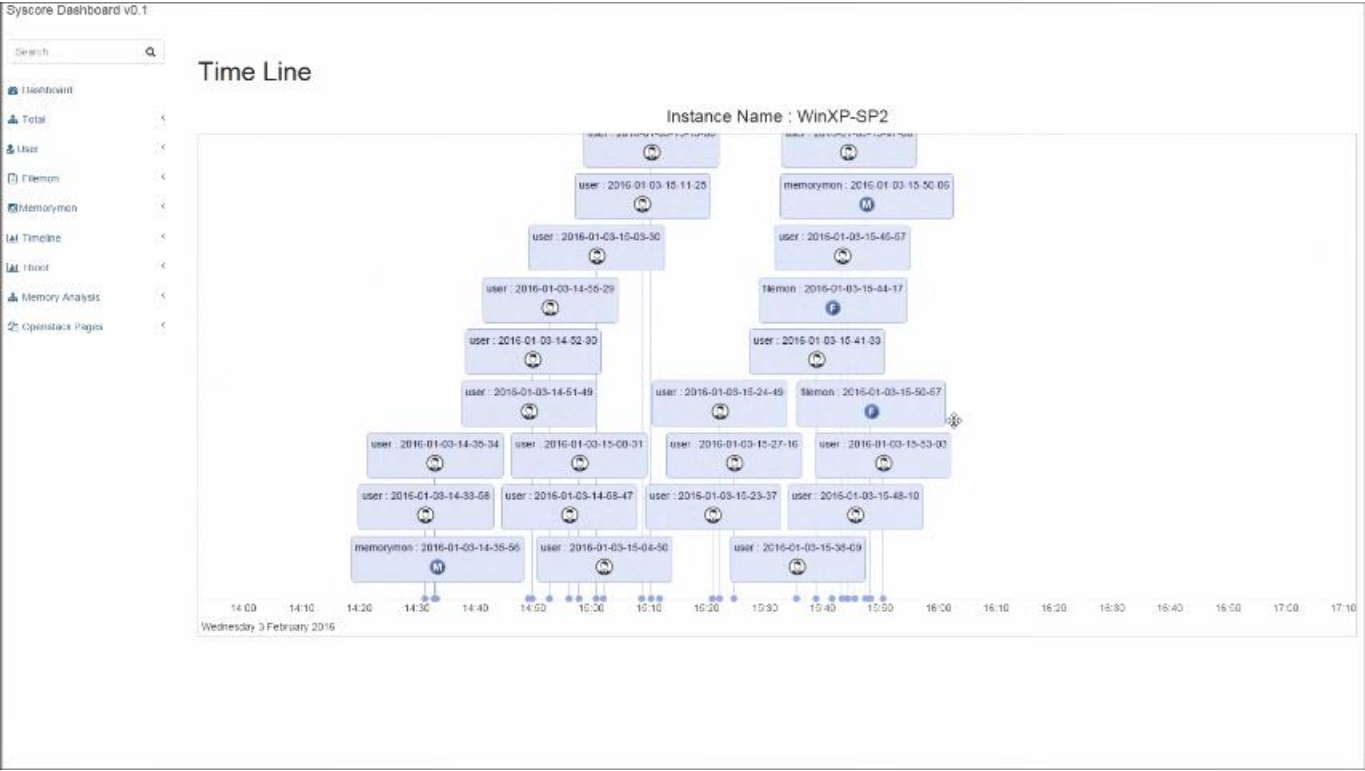


# Accelerating Memory Dump

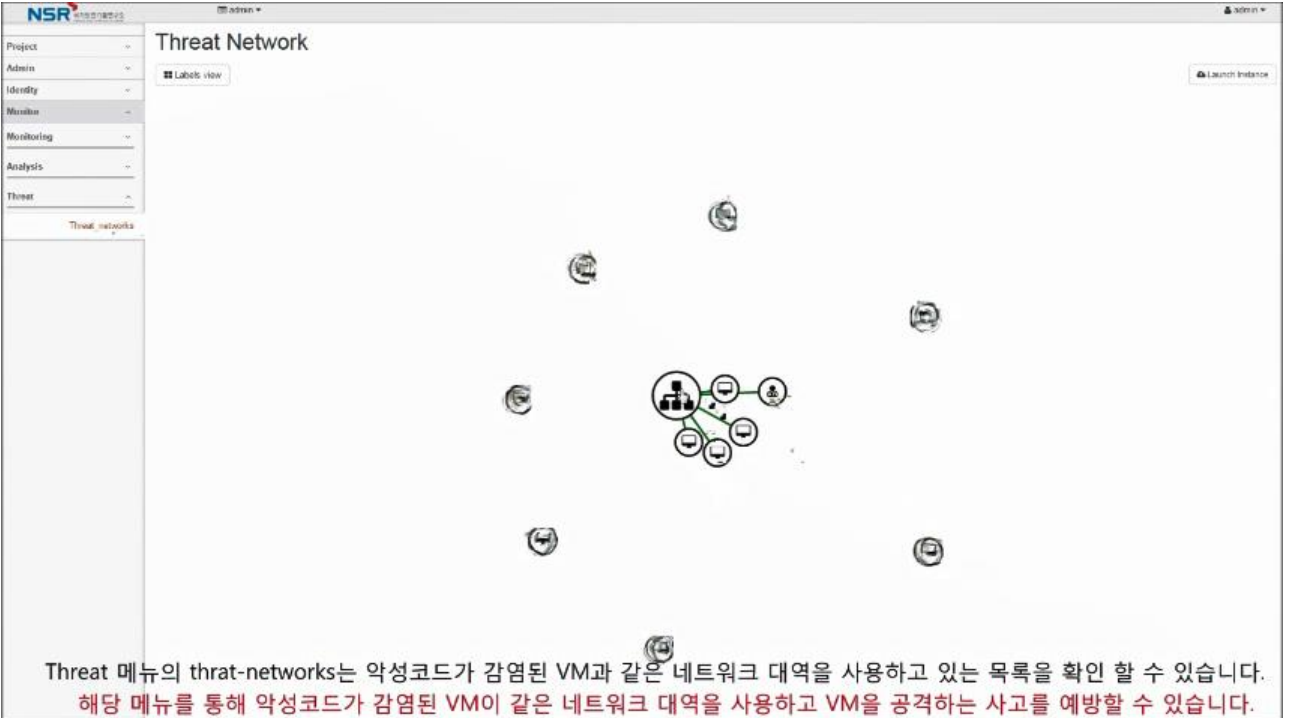
## ❖ Conventional Memory Dump vs. Thunder



# OpenStack with Replayable Memory



# Virtual Machine Isolation Technology for CERT



The screenshot displays the NSR Threat Network interface. On the left, a sidebar menu lists various functions: Project, Admin, Identity, Mission, Monitoring, Analysis, and Threat. The 'Threat' menu is currently selected, and the 'Threat networks' sub-menu is active. The main area, titled 'Threat Network', shows a network diagram with a central cluster of nodes connected by lines, and several isolated nodes scattered around. A 'Launch Instance' button is visible in the top right corner.

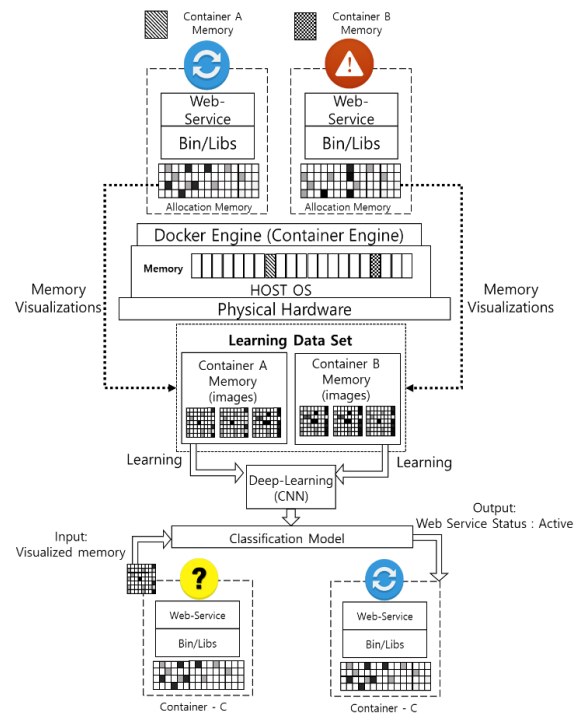
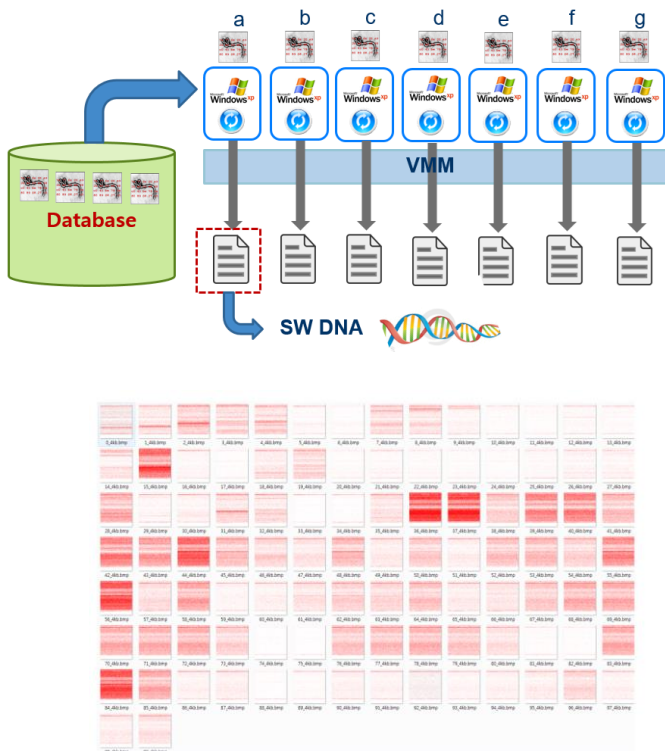
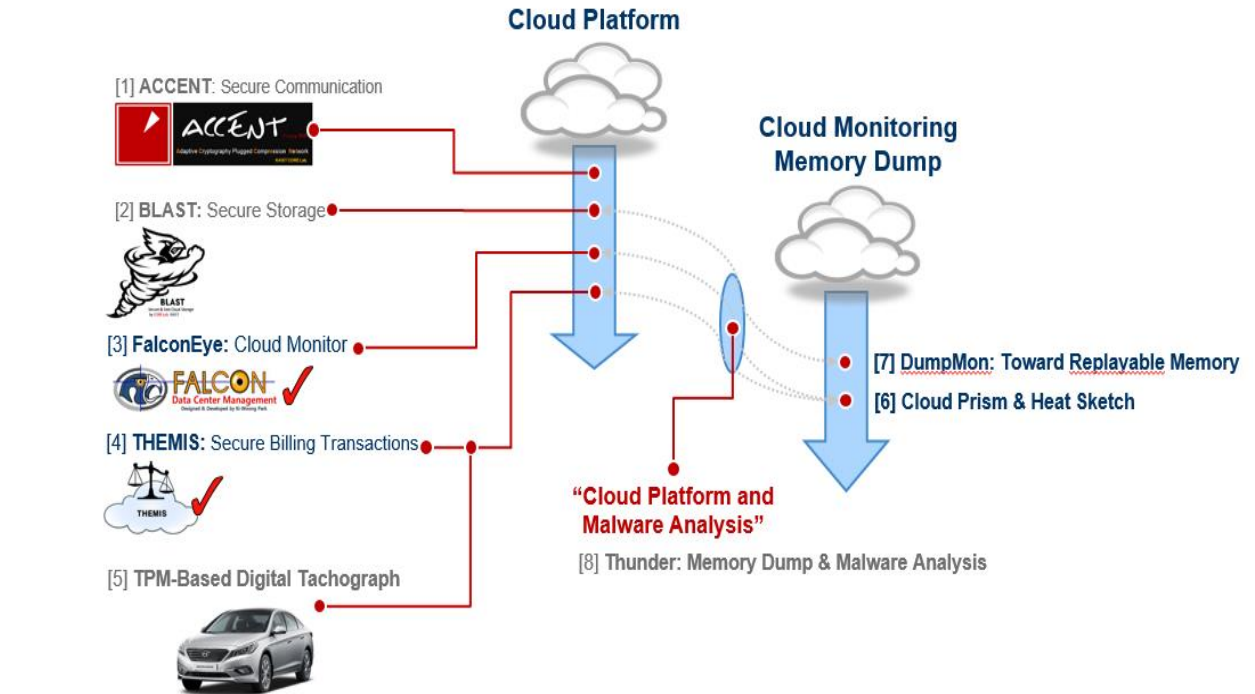
Threat 메뉴의 thrat-networks는 악성코드가 감염된 VM과 같은 네트워크 대역을 사용하고 있는 목록을 확인 할 수 있습니다.  
해당 메뉴를 통해 악성코드가 감염된 VM이 같은 네트워크 대역을 사용하고 VM을 공격하는 사고를 예방할 수 있습니다.



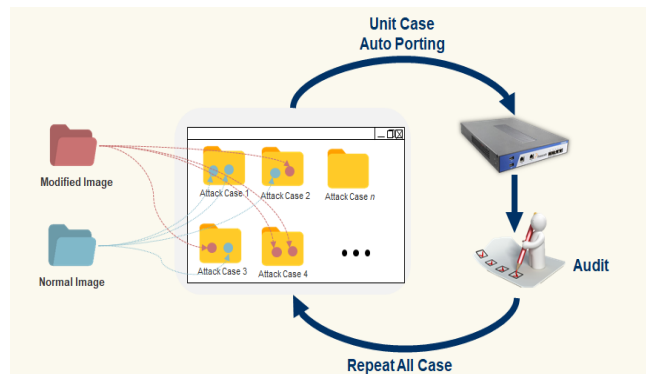
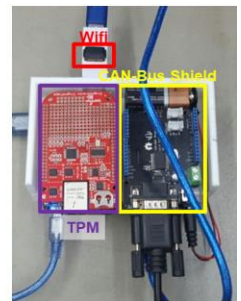
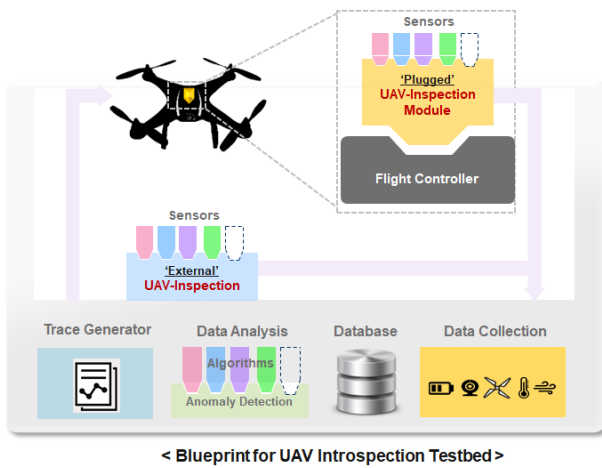
# Case Study: Memory Dump Visualization



# Brief Summary of the Research Experiences 1/2



# Brief Summary of the Research Experiences 2/2



# **SYSCORE**'s Approach

- 이왕 하는 것 재미있게 그리고 의미 있게 하자.
- 과제 수행을 위한 연구가 아니라 의미 있는 연구가 되도록...
- 회의는 때로는 연구실에서, 디스커션은 정말 편한 분위기에서 재미있게..
- 기존의 연구결과(?)는 오히려 상상력을 해칠 수 있다.



# **SYSCORE's** Life



**ACM CCS 2019, London**

# **SYSCORE's** Life



**ICNGC 2019, Thailand**



# **SYSCORE's** Life

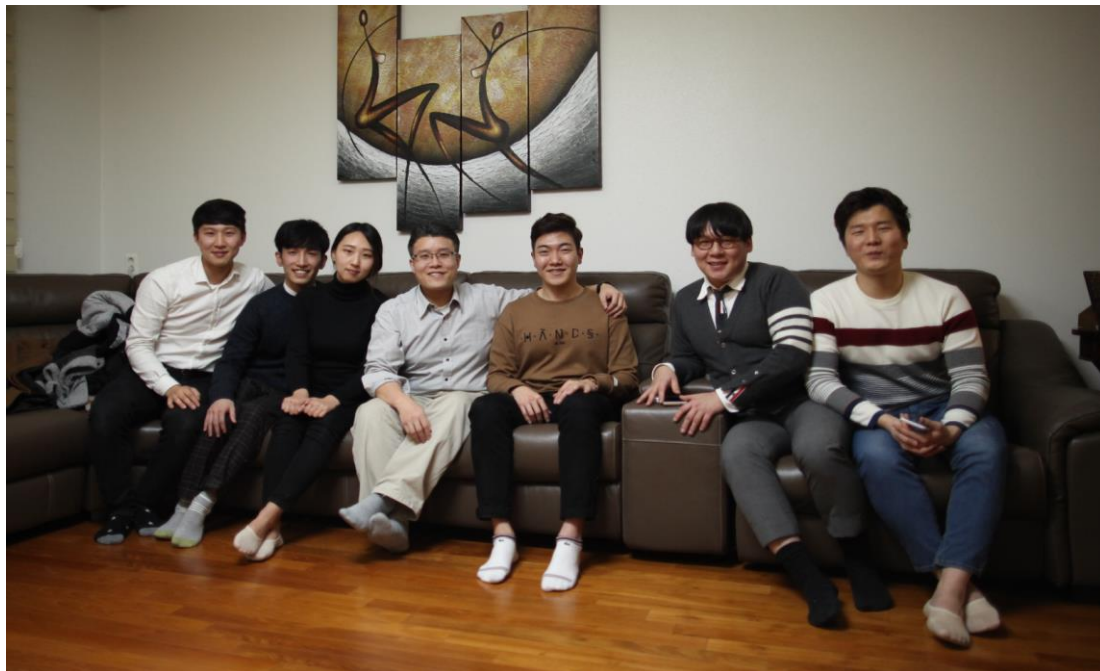


# **SYSCORE's** Life





# **SYSCORE's** Life





# **SYSCORE's** Life





# **SYSCORE's** Life



# **SYSCORE**'s Life





# SYSCORE's Awards

