# The 2015 Network and Distributed System Security Symposium NDSS Report

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For:The Research School "COINS Research School of Computer and Information Security"

## I.    NDSS

NDSS is a  three day conference bringing together innovative and forward thinking members of the Internet community including leading-edge security researchers and implementers, globally-recognized security-technology experts, and users from both the private and public sectors who design, develop, exploit, and deploy the technologies that define network and distributed system security.

## II.    What to expect

NDSS focuses its activities on:

- Presentations of solution-oriented scientific and technical papers presented by leaders in the field
- Experts debating new and practical approaches to security problems
- Extended question and answer sessions following all presentations
- Informal discussions with colleagues over the three-day period

## III.    Learnings

The 2015 NDSS covered the below tracks:

- Web security
- Mobile security
- Detection, Analysis, prevention and response
- Privacy
- Social networks and cloud services
- Authentication
- Network security

Being at the early stages of my PhD, it was greatly valuable to see what other research groups are working on, whether be it in universities or industry. The authentication track has been the most relevant one for me, and throughout the talk I could refine my research question, and connect with fellow researchers working on related topics, namely the security group based at the Royal Holloway college of London.

Throughout the different tracks, it was very interesting to note the trend of usable security, in which security the user experience is no more an after-thought by rather a design criteria that is incorporated into the solution since the beginning.

One other trend that was interesting was the dominance of the attack papers especially the ones focusing on JIT. Indeed, until recently, it was widely believed that coderandomization (such as fine-grained ASLR) can effectively mitigate code reuse attacks. However, a recent attack strategy,dubbed just-in-time return oriented programming (JIT-ROP),circumvents code randomization by disclosing the (randomized)content of many memory pages at runtime. A number of the conference talks focused either on presenting attacks, or remediation mechanisms for such attacks.

Furthermore, given the latest security news, there were also a number of discussion centered on privacy and how we can (re)define it, especially that end users are becoming increasingly aware of such breaches against their personal data, and more demanding with regards to having privacy insurances before using any given service.

The different security angles that were brought up, brought me to refine my research question, namely by targeting it towards mobile security.

Last but not the least, the conference offered great networking opportunities, mainly through the dinner organized. The location of the conference is a very pleasant, as it takes place at a resort hotel right by the sea side, making the overall experience even more enjoyable and relaxing.