

Reflection Report On

” *COINS PhD student seminar 2015 (Stockholm)*”

Mohamed Abomhara
Dept. of ICT, University of Agder
mohamed.abomhara@uia.no

1 Summary

The Research School of Computer and Information Security (COINS) organizes a yearly PhD student seminar. The seminar is open for all PhD students and research fellows who are registered members of the COINS research group. The COINS PhD student seminar is organized over intensive one or two-day lectures. The lectures are divided into a few sessions from morning until evening with breaks in between. The lecturers, who are leading PhD students in their field, provide the participants with a unique opportunity to listen to keynote speakers and interact with top experts in information security. Moreover, PhD students present their research status and receive feedback from participants. Attending a COINS PhD student seminar involves listening to presentations and conversing with other PhD students and researchers as well as socializing with colleagues from other institutions. The COINS PhD student seminar is a professionally rewarding experience. Here are some of the reasons we attended the COINS PhD student seminar:

1. ***Educational opportunities:*** more learning opportunities owing to lectures given by top experts in information security. It is possible to learn about others' current research stats, new ideas and techniques. Being around like-minded people is inspirational and refreshing. It can help to greatly improve oneself and discover how to be more productive.
2. ***Networking with peers:*** The COINS PhD student seminar is a great way to connect with old and new PhD students who are interested in information security. Meeting experts and other PhD students helps obtain new ideas and is a great opportunity for joint works.
3. ***Have fun:*** Being in education should be rewarding and fun. All work and no play can get old fast, while the COINS PhD student seminar adds a layer of

enjoyment by mixing the social aspect into ones learning and branding efforts. Many social events are held at the COINS PhD student seminar.

This year, the COINS PhD student seminar took a place in Stockholm, Sweden, at KTH (Royal Institute of Technology) on Sunday, the 18th and Monday the 19th of October 2015. This seminar was followed by the NordSec conference (the 20th Nordic Conference on Secure IT Systems) and the CySeP (Cybersecurity and Privacy) winter school.

- **First day (18th Oct., 2015)**

The seminar began with a welcome talk by Hanno Langweg. He talked about all previous and future COINS activities. During Hannos talk, PhD students were involved in proposing future activities such as COINS winter school and summer school. Proposals were made on how to integrate 20 new students in COINS, as well as how to improve research collaboration among COINS students and other research schools like SWITS (the Swedish IT Security Network for PhD Students) based on common topics.

Next was a presentation by current and former COINS PhD students. Ebenezer Paintsil (a former COINS PhD student) discussed his experiences from academics through to industry. His presentation was called From PhD to industry. In this talk, he shared with us the barriers and difficulties he faced when shifting from the academic field to industry. He walked us through all his experiences starting with writing a PhD thesis until he got a job at a company. Paintsil explained how to avoid problems along the way and not to worry when facing problems.

Mohamed Abomhara, Samson Gejibo and Leonardo Iwaya (current COINS PhD students) shared a presentation about E-health security. This session was intended to present different contributions within the area of E-health security. Abomhara talked about an improved access control model he proposed for collaborative healthcare systems. He explained the importance of patient data confidentiality, collaboration requirements and the need for flexible access for healthcare providers. The main goal of his proposed model is to provide an access control that attains a balance between collaboration and safeguarding patient information.

Gejibo presented security aspects of mobile data collection systems (MDCS), which are specialized mHealth systems that use mobile devices to collect data relating to health matters by generally filling out forms on a mobile device. He explained security challenges in mobile data collection systems deployed in remote areas and in low-budget settings, and how he developed a secure solution that is compliant with regulatory security and privacy requirements. Iwayas presentation addressed mainly the problem of data anonymization for patient records, in which medical ontologies are used to improve data utility along the process.

Moreover, in the first day of the seminar, there was a panel discussion (ask a professor/professional). In this session, PhD students asked a professor questions about problems related to their PhD project and the professor tried to answer all the questions.

Last but not least, the first day concluded with a dinner at King Tan restaurant in Stockholm, Sweden.

- **Second day (19th Oct., 2015)**

The second day started with a group discussion about COINS activities in 2016/2017. The students elected student representatives to represent the COINS students in the COINS steering committee. This was followed by a talk given by Oleksandr Kazymyrov, a former PhD student. Kazymyrov presented Halfway to PhD? What will happen next? In the talk, he explained some strategies to attempt and solve any problems that may arise during PhD studies.

Finally, the seminar ended with how to give all new COINS students a good start in 2016. A lunch followed and then the NordSec conference. The NordSec conference addressed a broad range of topics within IT security with the aims of bringing together computer security researchers and encouraging interaction between academia and industry.