

CybAlliance WP2 Annual Open Seminar Report 2023

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Abstract

The primary goal of CybAlliance is to build a long-term strategic alliance in advancing research and education on cybersecurity and privacy in healthcare. To achieve this goal, one of the objectives is to organize workshops/webinars and open seminars so that national and international collaborators can meet and discuss the strengths and opportunities of the domain. This objective will be performed under WP2 (“Research Cooperation”) Task 2.3 (“Open Seminar”) which aims to provide an opportunity to discuss outcomes of the project with interested industry or academic personnel who are not part of the consortium. This project through this task will provide networking opportunities and result dissemination platform for education, research, and innovation activities by organizing national and international academic and industrial workshops. This report presents the results D2.3 (“Organize open seminar”) from this task performed in 2023.

1 Introduction

This report presents the progress and achievements of WP 2.3 (“Open Seminar”) whose main objective is to provide an opportunity to discuss outcomes of the project with interested industry or academic personnel who are not part of the consortium. Section 2 describes the organization and running of the Open Seminar was on Strengthening Cybersecurity and Privacy in Healthcare. Sections 3 and 4 describe the presentation of the two INTPART Projects, and Networking/Collaboration Ideas, respectively. Section 5 presents concluding remarks and future work.

2 Annual Open Seminar 2023

The Open Seminar was on Strengthening Cybersecurity and Privacy in Healthcare organized by NTNU and hosted by NR. This section is a contribution report from NTNU.

Objective: This Open Seminar on Strengthening Cybersecurity and Privacy in Healthcare aims to provide an open platform for national and international collaborators to meet, exchange knowledge, and facilitate discussions on the strengths and opportunities within the domain. Additionally, this seminar offers interested industry or academic professionals, who are not part of the CybAlliance project, the opportunity to actively participate and engage in discussions related to cybersecurity and privacy in healthcare. By bringing together diverse perspectives, this open seminar seeks to enhance collaboration, generate new insights, and contribute to the advancement of the field.

Target Audience: Partners + Invited Speakers + Open to all stakeholders (by registration)

2.1 Open Seminar Agenda

Open Seminar Agenda

Time	Session	Lead	Affiliation
09:30 – 09:45	Registration		
09:45 – 10:00	Welcome and Introduction to CybAlliance project	Sandeep Pirbhulal	Norsk Regnesentral (NR)
10:00 – 10:15	Introduction to RECYCIN project	Saba Chockalingam	Institute for Energy Technology (IFE)
10:15 – 10:45	Keynote 1	Sokratis Katsikas	NTNU
10:45 – 11:30	Networking/Collaboration ideas		NR
11:30 – 12:30	Lunch		
12:30 – 13:15	Keynote 2	Bian Yang	NTNU
13:15 – 13:30	Coffee break		
13:30 – 14:20	Panel discussion "Industry (Hospital) and Academic Perspectives on Challenges and Gaps in Cybersecurity and Privacy of Healthcare"	Vasileios Gkioulos Narges Arastouei Ulf Sigurdson Kenneth Iversen	(NTNU- DNV) (GUF, Germany) (Helse Sør-Øst RHF) (Sykehuspartner HF)
14:20 – 14:30	Closing remarks		NTNU

2.2 Brief description

As a part of the CybAlliance seminar, NTNU organized an open seminar at Norsk Regnesentral (NR), with the goal of providing an open platform for national and international collaborators to meet, exchange knowledge, and facilitate discussions on the strengths and opportunities within the domain. By bringing together diverse perspectives, this open seminar seeks to enhance collaboration, generate new insights, and contribute to the advancement of the field.

Two professors from NTNU were the keynotes in the seminar, Professor Sokratis Katsikas, and Professor Bian Yang.

Saba Chockalingam was invited as a speaker from the Institute for Energy Technology (IFE)

After registration, Sandeep Pirbhulal from NR welcomed the audience and introduced the CybAlliance project.

This was followed by an introduction to the RECYCIN project by Saba Chockalingam.

Our first keynote Professor Sokratis Katsikas then gave a talk about IT-OT Security in Healthcare, and the talk was followed by a networking session to develop collaboration ideas.

After lunch, the second keynote Professor Bian Yang gave a talk about Healthcare Privacy Scenarios and Potential Solutions B.

The seminar ended with a panel discussion with the title "Industry (Hospital) and Academic Perspectives on Challenges and Gaps in Cybersecurity and Privacy of Healthcare", with Vasileios Gkioulos from (NTNU- DNV), Narges Arastouei from (GUF, Germany), Ulf Sigurdson from (Helse Sør-Øst RHF), and Kenneth Iversen from (Sykehuspartner HF) as the panelists, and Aida Akbarzadeh from (NTNU) as the moderator.

During the open seminar, there was a discussion aimed at facilitating collaboration between academia and industry. The participants discussed various ideas and topics for collaboration, which included suggesting potential topics in addition to existing topics and exploring each other's interests. To ensure future collaboration, all the suggested topics and contact information were documented in a shared document accessible to all partners.

3 Introduction of Two INTPART Projects

CybAlliance and RECYCIN projects were presented and given below is their introduction:

CybAlliance: This project is to establish a long-term partnership between Norwegian Computing Center (Norway), Norwegian University of Science and Technology (Norway), Oslo University Hospital (Norway), University of Colorado (USA), Institut Mines Telecom/Telecom SudParis (France), and Goethe University Frankfurt (Germany). This international partnership is centered around activities that promote excellence in both research and education in cybersecurity and privacy in the healthcare sector in Norway, USA, France, and Germany

RECYCIN: This project will assimilate the competence and enable the Norway and US partner institutions to support the development of a state-of-the-art cyber security academic and research infrastructure. The project will connect education with industry needs and research institutes with higher education institutions to both provide advanced research and education in cyber security of Critical Infrastructures. RECYCIN project is funded by the Research Council of Norway. This project is a collaboration between IFE, Østfold University College, Norwegian University of Science and Technology, and Virginia Tech.

4 Networking/Collaboration Ideas

In this section, we discussed the expertise which are pivotal in shaping the future of the healthcare field. Following are some of key topics and areas discussed in the open seminar which need attention and potential collaboration:

- Healthcare Security and Resilient Society Solutions
- Health Data and Information Security
- Dynamic Risk Management in Smart Homes
- Integrated Security and Safety for Healthcare
- Trust and Identity Management for Healthcare
- Digital Twin for Cybersecurity & Secure Digital Twin in TeleCare
- Secure Infrastructure for the Intelligent healthcare system
- Secure and smart data sharing between stakeholders, health manufactures, research parties and other parties.
- Smart categorization of health data

In CybAlliance team along with support of qualifying and supporting projects, we are discussing these ideas and how to develop potential consortium to generate some project proposal around these topics.

5 Conclusions and Future Work

This report presented the progress and achievements of WP 2.3 (Open Seminar) whose main objective is to provide an opportunity to discuss outcomes of the project with interested industry or academic personnel who are not part of the consortium. The achievements include the provision of networking opportunities and results dissemination platform for education, research, and innovation activities through the organization of open seminar (D2.3) in 2023 on Strengthening Cybersecurity and Privacy in Healthcare. The open seminar was organized by NTNU and hosted by NR, and it provided the presentation of the two INTPART Projects, and Networking/Collaboration Ideas.

In our future work in 2024 the open seminar will be organized by another project partner to maximize the provision of opportunity to discuss outcomes of the project with interested industry or academic personnel who are not part of the consortium.