

## The Role of AI:

# How does AI impact OT, OT security, and IT security?

Al is a strong option to perform in business and in security. An overview on Al in security defence & offence demonstrates Al's capability. How to use Al in everyday's security life will provide state-of-the-art insights.

16<sup>th</sup> Forum, September 11, 2025 12:00-20:30 h, Anna Seiler Haus, room U1\_007, Freiburgstrasse 20, 3010 Bern. Public transport: Bus stop «Inselspital» of line 12



### Mission

## Why should you attend?

The Swiss OT-IT Cyber Security Forum Series is a sequence of events which takes place three times per year, with the strategic goal to unify OT and IT decision makers. The main objective is achieving significant advances in security.

#### **Background:**

Historically, the two communitities had completely different set-ups:

- IT used to follow the speed of technology evolvement, with product cycles of about three years and extremely fast fixing of faults and errors: short reaction time of less than one hour is common practice by today.
- OT used to create solutions in the mechanical space with life cycles reaching from 25 to 70 years, with little maintenance on average every 3-5 years.

In the past few years the use of IT in OT installation has been increasing dramatically and OT is now fully integrated in cyberspace. Therefore, the need to connect the two communitities is now more important than ever before in order to address the mutually dependent topics including security issues.

#### Design of the forum:

- 3 meetings per year
- 2-3 talks from industry leaders delivered in English
- Several roundtables lasting 1 hour in D, F and E at every meeting

#### Participation fee:

- CHF 360 per event, alternatively CHF 960 for three events (one year)
- Participation by invitation only. Proposal for inviting additional key persons mail to: bmhaemmerli@OT-IT-CyberSecurityForum.ch

#### **Content:**

The content will be coordinated by Prof. Dr. Bernhard M. Haemmerli, Hochschule Luzern, and will be created by the organizing committee.

#### **Organizing Committee:**

Drives the process for the meetings with delegates, sponsors and selected partners.

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### The Role of AI:

# How does AI impact OT, OT security, and IT security?

Artificial Intelligence (AI), Machine Learning (ML), and many of the core algorithms in use today have been around for over 30 years. What's new is the ability to store and process massive amounts of data, enabling systems to be trained more effectively than ever before.

A major breakthrough came in 2017 at the NeurIPS conference, when Google researchers introduced the transformer architecture in their landmark paper "Attention Is All You Need." This innovation laid the foundation for modern Large Language Models (LLMs), including the release of ChatGPT-1 in 2018, which made a specific type of Al accessible to the general public.

Since then, AI has evolved at an astonishing pace. From ChatGPT-1 to today's advanced models, we've seen rapid improvements in capabilities – often on a monthly basis. This progress has sparked public debate, not only about the dual-use nature of AI (for both defense and offense) but also about more speculative, science fiction-like scenarios: Could robots one day lead, self-repair, or even reproduce with consciousness?

In this context, our focus is on practical, grounded applications of AI – both today and in the near future – while acknowledging that unexpected breakthroughs could dramatically shift the landscape.

#### We explore key questions:

- What is AI, and how can it be used to defend OT and IT infrastructure?
- What progress can we expect in the coming years?
- How can organizations identify the best Al solutions for their needs?
- How is Al being used by attackers to enhance their methods?

We already see Al-driven improvements in phishing, malware obfuscation, attack variation, and the speed of innovation in cyber threats. To stay professional and well-informed in our security roles, we must deepen our understanding of Al – its capabilities, its risks, and its potential.



## The Role of AI:

# How does Al impact OT, OT security, and IT security?

Keynotes preparing discussions:

Al Capabilities & Al Principles in Security und Attacks: What is relevant for OT & IT?

Frank Heinzmann, Hochschule Luzern

Al in OT and IT defence: An experience report of an advanced company

Speaker TBD

Roundtables:

Roundtable 1:

Refining AI principles and capabilities: Which options we can apply in OT and IT, and how does this change the future threat and defense landscape?

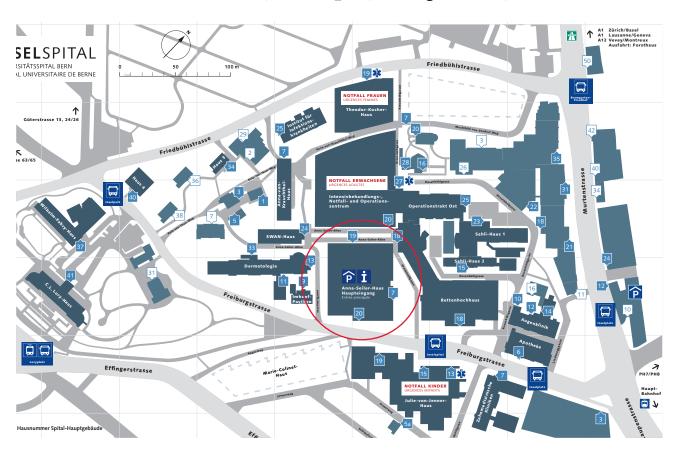
Roundtable 2:

Introduction of AI in OT and IT security in my company: What are prerequisites, which are initial steps, and how to take maximum benefit?

Date: September 11, 2025

Time: 12:00-20:30 h

Location: Anna Seiler Haus, room U1\_007, Freiburgstrasse 20, 3010 Bern





16<sup>th</sup> Swiss OT-IT Cyber Security Forum Sept. 11 2025, 12.00 – 17:30 h Social activity and dinner end at 20:30h

# **Agenda**

In-Person Meeting: Insel Spital, Anna Seiler Haus, room U1\_007, Freiburgstrasse 20, 3010 Bern

Online Table will be offered, and online streaming of presentations (good online quality)

12:00	Lunch at Insel Spital	
12:45	Networking among participants	
13:10	Welcome note by Urs Meier, Head Governance, Risk and Compliance, and Prof. Bernhard Hämmerli	
13:30	Al Capabilities & Al Principles in Security und Attacks: What is relevant for OT & IT? Frank Heinzmann, Hochschule Luzern	
14:10	Roundtable 1: <b>Refining AI principles and capabilities: Which options we can apply in OT and IT, and how does this change the future threat and defense landscape?</b>	
15:00	Exchange between groups	
15:15	Break	
15:45	<b>Al in OT and IT defence: An experience report of an advanced company</b> Speaker TBD	
16:15	Roundtable 2: Introduction of AI in OT and IT security in my company: What are prerequisites, which are initial steps, and how to take maximum benefit?	
17:05	Exchange between groups	
17:20	Wrap-up and information on next meeting	
17:30	Social Activity at Insel: Insights in advanced OT- and IT-application in the medical sector	
18:45	Invited Dinner <b>Restaurant Ambiente</b> , Bühlstrasse 5, 3012 Bern, near by Train Station, and 6 min walk from the Forum.	
20:30	End of the meeting	
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## **Swiss OT-IT Cyber Security Forum 17**

## Tentative – Subject to Voting: Auditing OT Systems – Exploring Options, Processes, and Reporting Strategies

Auditing and security testing of OT (Operational Technology) systems offer a wide range of approaches—but which is best suited for a specific context? To make informed decisions, it's essential to understand the spectrum of options, from bug bounty programs and red teaming to penetration testing and compliance-driven framework audits. Equally important is how the results are communicated. Should findings be presented through traditional reporting, or is a risk communication approach more effective?

We look forward to a lively discussion and exchange of experiences on these essential topics.

Place: Zurich Area

Speakers: TBD

Roundtable 1: Understanding security testing and audit: What are the options,

and what are the criteria to select a specific approach?

Roundtable 2: Reporting, risk communication and other influence on decision makers:

What are the best options to invoke the desired actions?

# **Swiss OT-IT Cyber Security Forum 18**

#### Tentative - Detailed Asset Management for Software and Hardware: What is its security impact?

Asset Management is the very first step one must do, to experience its own risk profile. But is general asset management of devices and software packages sufficient: No: it needs more. We must know the components in hardware and software. The SSL attack demonstrated that just one component can be wrong. But this component might be implemented in 100 different applications. If a component-based asset management is done, we can easily replace in the known software the packages. If we have first to make asset management – the down time or time being vulnerable is much longer.

Date: Tentative: Thursday, June 11, 2026, 12:00-20:30h

Place: Zurich Area

Speakers: TBD

Roundtable 1: Understanding asset management and the variety of approaches which exists today.

Roundtable 2: Strategy, tools, methodology: Choice we have, and must finetuned and adopt to

specific use cases in the corporation.



# Registration

Register by replying to the invitation email with all your details – or by filling out this form, scanning it in or taking a smartphone picture.

Send the completed form to: info@OT-IT-CyberSecurityForum.ch

Three consecutive forums for CHF 960 Forum 16 (11.09.2025), Forum 17 (05.03.2026), and Forum 18 (11. 06, 2026)			
16 <sup>th</sup> OT-IT Cyber Security Forum, Sept. 11, 2025 only, at the price of CHF 360.–.			
Register for social activity 17:30-18:45			
Register for the sponsored Dinner 19:00-20:30 at <b>Restaurant Ambiente,</b> Bühlstrasse 5, 3012 Bern			
Online Attendance: I will attend online in WebEx (link is in the calendar entry)			
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First Name	Last Name		
Organisation			
Job Title			
Street / No.	ZIP / City		
Phone	Cellphone		
Email			
Please add instructions for invoice, needing an offer etc.:			



### **Mission**

The Swiss OT-IT Cyber Security Forum Series is a sequence of events which takes place three times per year, with the strategic goal to unify OT and IT decision makers and bring culture, language and security priorities on level of mutual understanding.

The main objective is achieving significant overall advances in security (OT & IT).

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