

Transitional Cybersecurity Measures: SwissCyber Initiative

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Informatics Institute, **HES-SO Valais-Wallis**



20 June 2025

Cyber-Alps Retreat
Hotel Schatzalp, Davos

Goal of the Project

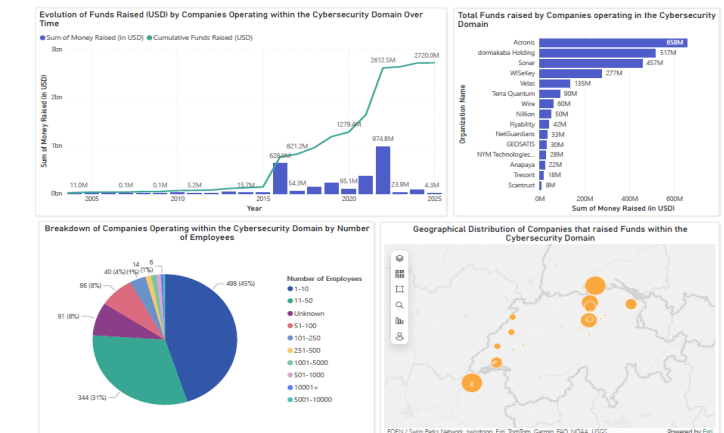
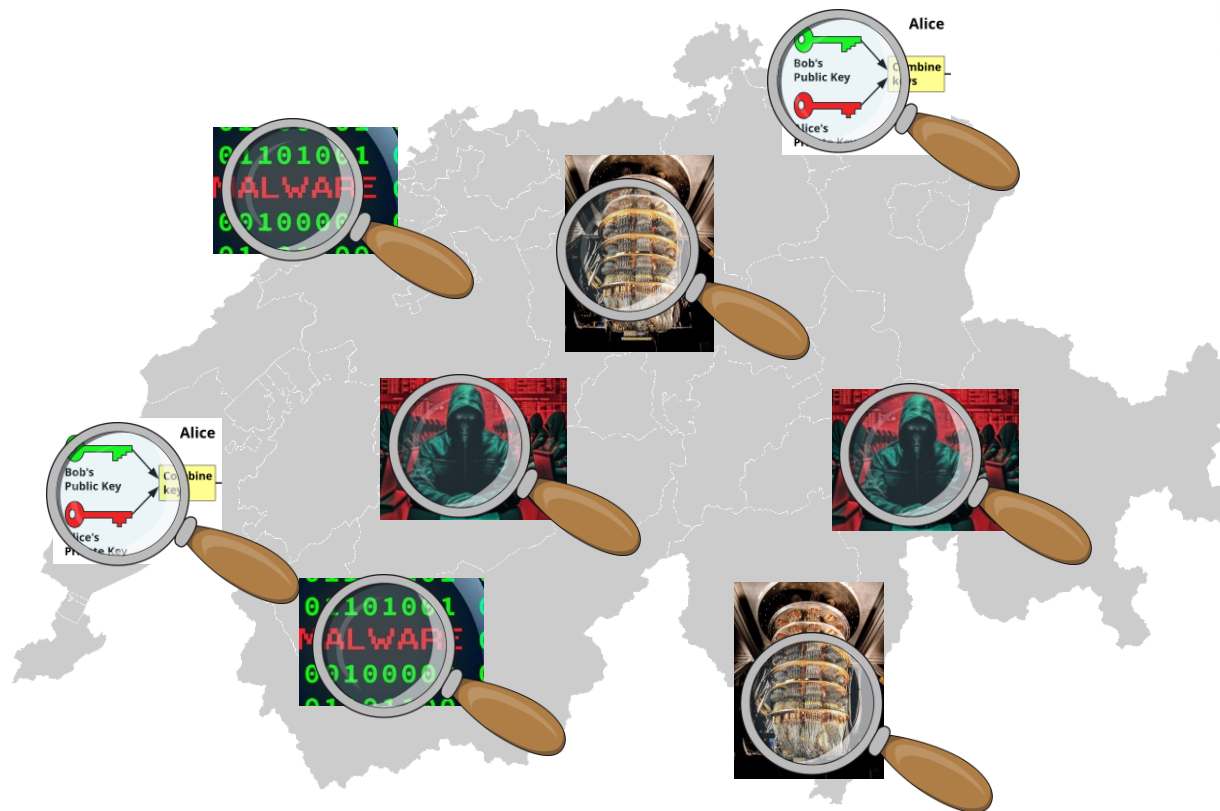


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Swiss Confederation

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**State Secretariat for Education,
Research and Innovation SERI**

Federal Department of Defence,
Civil Protection and Sport DDPS
National Cyber Security Centre NCSC



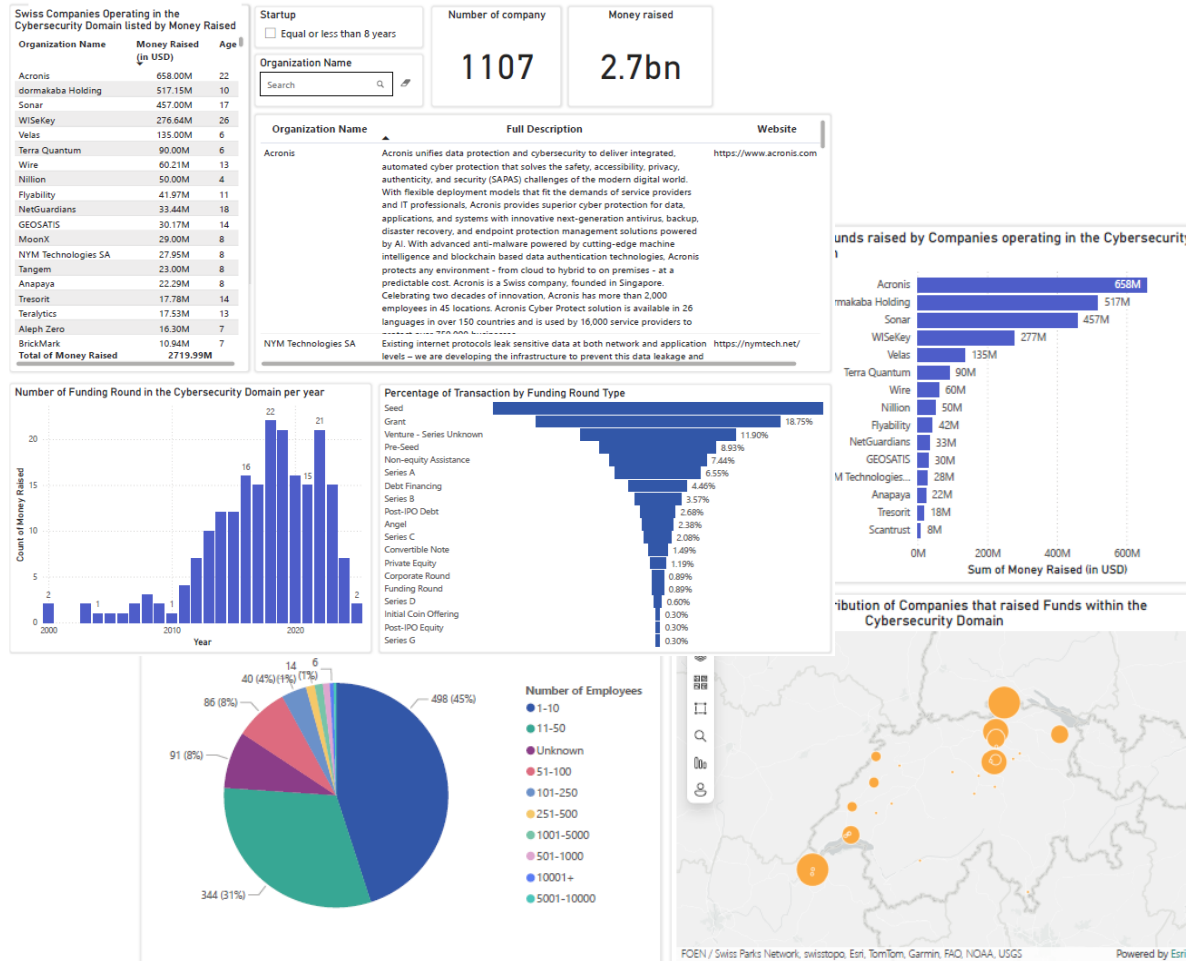
ACTUAL ➡ TARGET

Genesis of the Project



- Networking event on 14.09.2023 lead to the decision to extend a prior study about cybersecurity in academia to the industry
- Funding possibility in the context of the transitionnal measure of 2021-2027 Horizon package – approval in may 2024
- Elaboration of the project with SATW Cybersecurity Advisory Board, armasuisse and HES-SO Wallis/Valais

Cybersecurity R&D Landscape Dashboard



- Long-term:
 - Automatically updated
 - Persisting after the project end
- Actionable:
 - Able to inform strategic decisions
 - Sufficient to evaluate measures effects
- R&D occurring in:
 - Private companies
 - Public organizations

Cybersecurity R&D Landscape

ACTUAL / TARGET

ACTUAL Analysis

⇒ Comprehensive overview of the current state of cybersecurity R&D in Switzerland

- Public and private

⇒ Approaches:

- Data Mining
- Large-Scale cybersecurity community consultation
=> survey

TARGET Analysis

⇒ Understand of the cybersecurity R&D needs

- Discover current R&D blind spots
- Support evidence-based policy
- Maintain competitiveness in the global cybersecurity landscape

⇒ Approaches:

- Data Mining
- Targeted experts interviews

Cybersecurity R&D Landscape

Recommendations & Dissemination

Swiss Companies Operating in the Cybersecurity Domain listed by Money Raised

Organization Name	Money Raised (in USD)	Age
Acronis	658.00M	22
dormakaba Holding	517.15M	10
Sonar	457.00M	17
WiSeKey	276.64M	26
Velas	135.00M	6
Terra Quantum	90.00M	6
Wire	60.21M	13
Nillion	50.00M	4
Ryability	41.97M	11
NetGuardians	33.44M	18
GEOSATIS	30.17M	14
MoonK	29.00M	8
NYM Technologies SA	27.95M	8
Tangem	23.00M	8
Anapaya	22.29M	8
Tresorit	17.78M	14
Teralytics	17.53M	13
Aleph Zero	16.30M	7
BrickMark	10.94M	7
Total of Money Raised	2719.99M	

Startup
☐ Equal or less than 8 years

Number of company: 1107

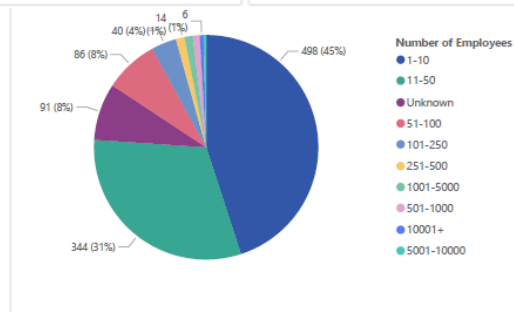
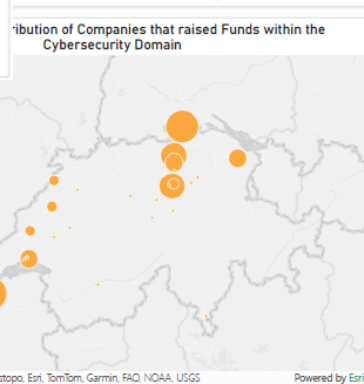
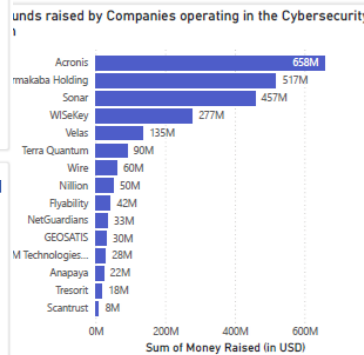
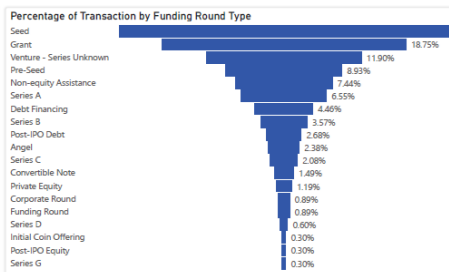
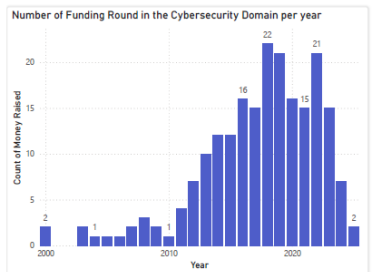
Money raised: 2.7bn

Organization Name:

Search:

Organization Name	Full Description	Website
Acronis	Acronis unifies data protection and cybersecurity to deliver integrated, automated cyber protection that solves the safety, accessibility, privacy, authenticity, and security (SAPAS) challenges of the modern digital world. With flexible deployment models that fit the demands of service providers and IT professionals, Acronis provides superior cyber protection for data, applications, and systems with innovative next-generation antivirus, backup, disaster recovery, and endpoint protection management solutions powered by AI. With advanced anti-malware powered by cutting-edge machine intelligence and blockchain based data authentication technologies, Acronis protects any environment - from cloud to hybrid to on premises - at a predictable cost. Acronis is a Swiss company, founded in Singapore. Celebrating two decades of innovation, Acronis has more than 2,000 employees in 45 locations. Acronis Cyber Protect solution is available in 26 languages in over 150 countries and is used by 16,000 service providers to protect their data. Acronis is a Swiss company, founded in Singapore. Celebrating two decades of innovation, Acronis has more than 2,000 employees in 45 locations. Acronis Cyber Protect solution is available in 26 languages in over 150 countries and is used by 16,000 service providers to protect their data.	https://www.acronis.com
NYM Technologies SA	Existing internet protocols leak sensitive data at both network and application levels - we are developing the infrastructure to prevent this data leakage and	https://nymtech.net/

ACTUAL
↓
TARGET



- Issue recommendations
 - Data-driven
 - Specific
 - Realistic
 - Actionable
- Disseminate the results
 - Public outreach
 - Targeted events

Advisory Board

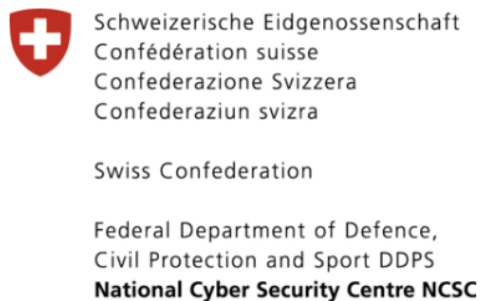


ETH zürich



Switch

HSLU Hochschule
Luzern



TRUST
VALLEY

Unil
UNIL | Université de Lausanne

Project Organization

Scientific Lead,
ACTUAL/TARGET
Recommendations

Hes·so VALAIS WALLIS



Loïc **Maréchal**
Research associate UAS



Dimitri **Percia David**
Associate professor UAS



Andrei **Kucharavy**
Assistant professor UAS

8 July 2025

Dissemination
& Outreach



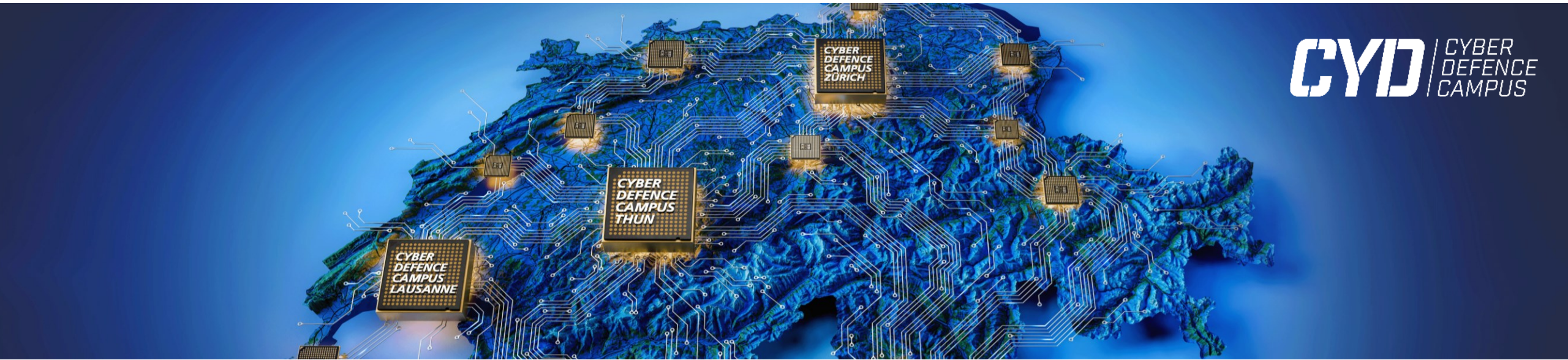
Prof. Dr. Andrei Kucharavy

Dashboard
Development





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CYD | CYBER
DEFENCE
CAMPUS

CYD Campus Contribution SwissCyber Initiative

20.06.2025

Vladimir Pfister, Cyber-Defence Campus

2023 : Mapping the Swiss Cybersecurity Academia Landscape



2023 : Academic Research Landscape

- CYD Campus open access study based on a survey
- Highlighting gaps in cybersecurity academic research



Resources per Domain and University

Appendix E: Resources per Domain and University

Table 3: Resources invested for each university and research domain (empty cells correspond to a value of zero).

	BFH	EPFL	ETHZ	FHNW	OST	HSIU	SUPSI	UNIBS	UNIBE	UNIL	UNINE	UNISG	USI	UZH	ZHAW	Total Resources	#Universities
Assurance, Audit, and Cert.				2.0												2.0	1
Cryptology	5.2	12.0	28.0			4.0						1.5	7.0			57.7	6
Data Security and Privacy	1.2	6.0	18.0					3.0		4.2			7.6		2.0	42.0	7
Education and Training				6.0	1.5		1.8							1.2		10.5	4
Human Aspects			12.0									2.4		7.6	1.2	23.2	4
Identity Management			2.0													2.0	1
Incident Handling/Forensics	4.0							1.2								5.2	2
Network and Distr. Systems	1.2	5.0	25.0	2.0		1.5		0.6	2.0		2.0				3.5	42.8	9
Security Mgmt and Govern.							1.2									1.2	1
Security Measurements				2.0												2.0	1
Software and Hardware Sec.		18.0	33.5	7.2									9.6		5.5	73.8	5
Steganography etc.																	0
Theoretical Foundations		2.0	6.0													8.0	2
Trust Mgmt. and Account.		7.0	10.0	1.2	1.1			0.6	5.0		2.0					26.9	7
Total Resources	11.6	50.0	134.5	20.4	2.6	5.5	3.0	5.4	7.0	4.2	4.0	3.9	24.2	8.8	12.2	297.3	
# Domains	4	6	8	6	2	2	2	4	2	1	2	2	3	2	4		

Burkhart, M., Meier, R., & Tellenbach, B. (2023, September). *Cybersecurity research landscape in Switzerland*. <https://doi.org/10.13140/RG.2.2.27275.60962>

2025 : Mapping the Swiss Cybersecurity Industry Landscape



Collaboration between Government and Academic Actors

Funding Institution



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**State Secretariat for Education,
Research and Innovation SERI**

Project Lead



Communication



Research Partner



2025 : Mapping the Swiss Cybersecurity Industry Landscape



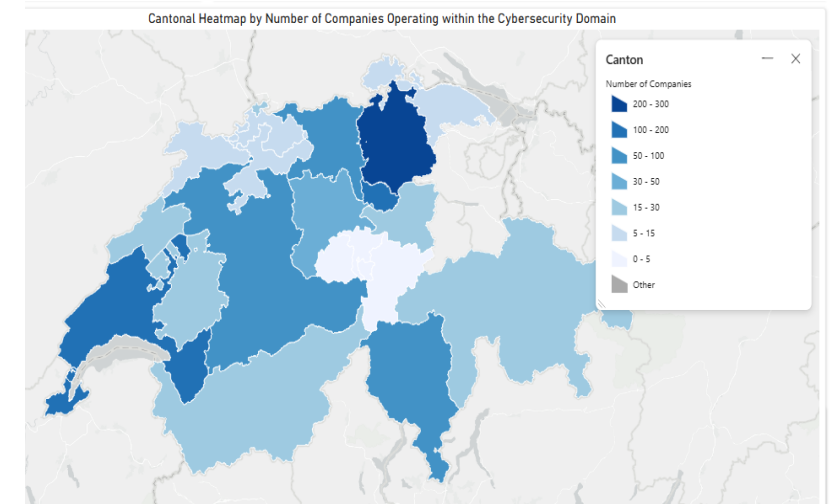
CYD Campus Contribution

- Human resources
- Office at EPFL Innovation Park
- Data source access
- Computing Power



2025 : Interest of the CYD Campus

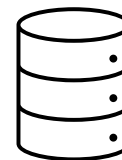
- Extend prior research findings to the **industrial R&D**
- **Monitore & Map** the Swiss cybersecurity market
- Create a **directory** of companies classified by cybersecurity domain



Data Used for the Study

Crunchbase

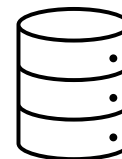
- Biggest financial database for private companies/start-up
- Many useful metrics available (e.g., field, funding, number of employee, etc.)



crunchbase

Pitchbook

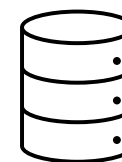
- US database part of Morningstar since 2016
- Used to complete Crunchbase (e.g., multiple company taxonomies, accounting data for large companies)



 PitchBook®

Other

- *Patent (SWISSREG)*
- *Commercial register (Zefix)*



SWISSREG



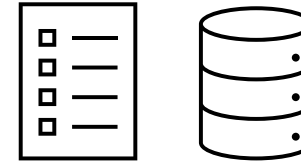
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Central Business Name Index

Data Used for the Study

Survey

- Experts' opinion on the **current state** of cybersecurity in Switzerland
- Experts' opinion on the **future** of cyber-threats, security and technologies
- **Quantitative** (likert scale) and **qualitative** (open-ended questions)
- **Qualitative data** will be processed with LLM and provide unbiased unexpected information



Swiss Cyber Initiative Survey



Help shape the future of cybersecurity in Switzerland!

The **SwissCyber Initiative** is a national project funded by the **Swiss State Secretariat for Education, Research and Innovation (SERI)**. It is led by **HES-SO Valais-Wallis**, in partnership with the **Swiss Academy of Engineering Sciences (SATW)** and the **Cyber-Defence Campus**.

This survey seeks to identify the strengths, challenges, future opportunities, and threats in the Swiss cybersecurity ecosystem. We are inviting cybersecurity experts, industry stakeholders, and investors to share their perspectives to help guide research, policy, and innovation.

HSLU Hochschule Luzern

Switch

SS SWISS SUPPORT CENTER FOR CYBERSECURITY

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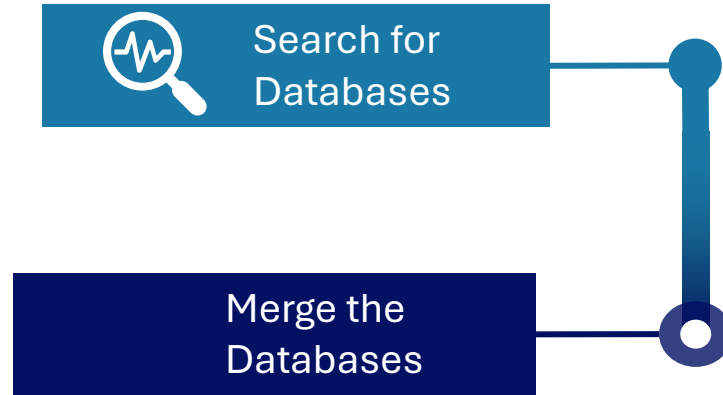
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Swiss Confederation
Federal Department of Defence,
Civil Protection and Sport DSDS
National Cyber Security Centre NCSC



Dataflow management



Dataflow management



Search for
Databases



Merge the
Databases

crunchBook



Machine Learning Labelling
according to European Official
Taxonomy

crunchBook+

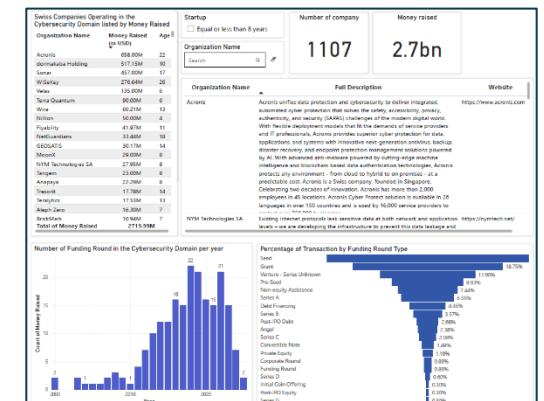


Deliverables

- Report
- Dynamic Dashboards

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SwissCyber Initiative

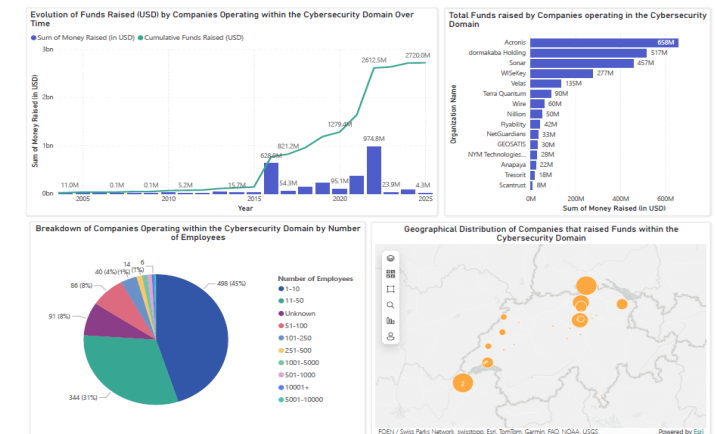
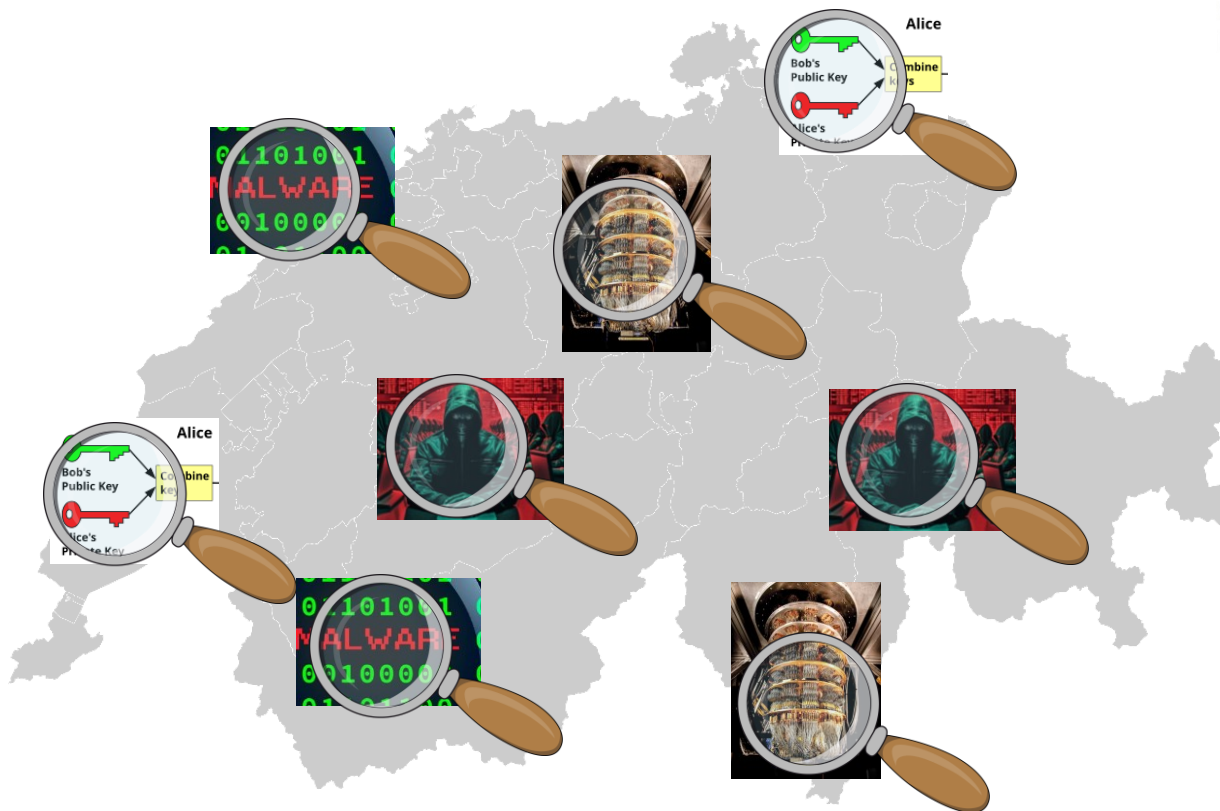


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Research associate UAS



Loïc **Maréchal**
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Matteo **Monti**
Research associate UAS



Alexander **Sternfeld**
Research associate UAS




Sherine **Seppey**
Economic associate



Gen Learning Center:
<https://tinyurl.com/hevs-gen-learning>



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