

CZECH
CYBER
EDGE

14.–16. 5. 2024

CYBERSEC 2024, Taipei



5

7



11



9

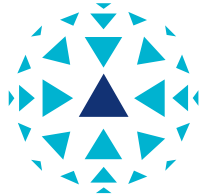


Content

15



13



T O V E K

17



19



Brno University of Technology



FIT BUT expertise ranges from cybersecurity, AI, image processing and computer graphics, automated verification, CPS, blockchain technologies, big data, embedded systems, robotics, AR/NR/XR, evolvable hardware, NLP and speech data mining, HW-SW code-sign of microprocessors for embedded systems, OCR, sensor data processing up to supercomputing. Core domains are followed by activities in the field of infrastructure and applications, their use in transportation, healthcare sector, societal services.

Within the cybersecurity, FIT BUT offer its expertise ranging from Forensics, Computer networks, Internet security, Security monitoring, AI-powered threat detection and hunting, Deception techniques, Blockchain technologies, Deepfakes, Digital security, Hybrid-/ cloud environment security, Hardware accelerated DDoS mitigation, Self-defending computer networks, Flow-based Encrypted Traffic Analysis, Automated network diagnostics, Analysis of IPFIX network data, up to big data analytics etc.

FIT BUT 專精於許多部分，從網絡安全、人工智能、圖像處理和電腦圖像學、自動驗證、虛實整合系統CPS、區塊鏈技術、大數據、嵌入式系統、機器人學、擴增實境 (AR)、虛擬實境 (VR)、延展實境 (XR)、演化式硬體、自然語言處理和語音數據探勘、針對嵌入式系統微處理器的軟硬體相輔設計、光學字元辨識、感測器數據處理到超級運算都是他們專精的項目。除了核心領域外，基礎設施及應用，以及交通、醫療行業、社會服務中的基礎設施應用也都是他們的專長。

在網路安全方面，FIT BUT 提供的專業知識包括法醫學、電腦網絡、網路安全、安全監控、AI 驅動的威脅檢測和追蹤、欺敵技術、區塊鏈技術、Deepfakes、數位安全、混合雲/雲端安全、硬體加速的 DDoS 緩解、自我防禦的電腦網路、依照流量變化的加密流量分析、自動網路診斷、IPFIX 網路數據分析，和大數據分析等。



www.vut.cz

For more information, please contact: / 如需更多資訊，請聯繫：
Martin Jirovec / jirovec@fit.vutbr.cz
Advisor to the Dean for Development
and Technology transfer



The 400GE SmartNIC designed by CESNET

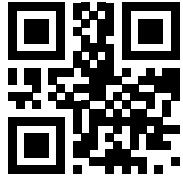
CESNET

CESNET is the operator of the Czech national research and education network providing connectivity and IT services to academic institutions and government offices. CESNET associates many brilliant researchers to deliver excellent outcomes in applied research and development of networking applications. Breakthrough achievements contain, e.g., IP cores for high-speed packet processing with 10, 40, 100, and 400 Gbps throughput. Our 400GE highly optimized FPGA SmartNIC has been already delivered to market. The packet processing and analysis IP cores can be used with any FPGA-based SmartNIC. Our primary goals are focused on high-speed network monitoring, traffic analysis, and network security. Thus, we developed a set of tools, such as ipfixprobe, ipfixcol2, and NEMEA framework, to address high requirements of the high-speed academic backbone infrastructure. Moreover, we leverage our expertise in machine learning to improve security detection and defense and to protect our network.

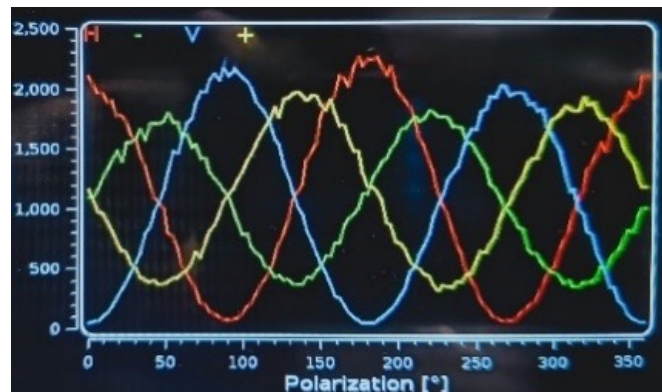
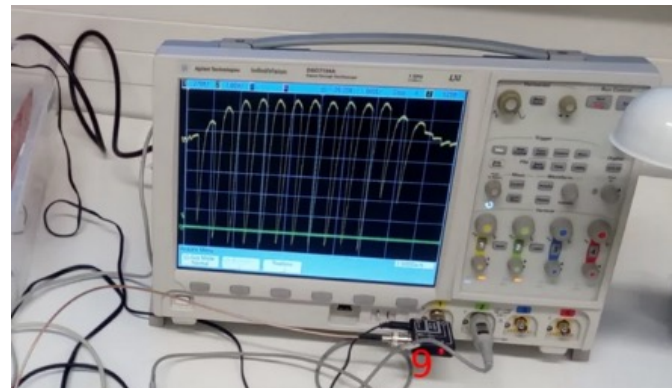
CESNET 是捷克國家研究與教育網路的運營商，為學術機構和政府機關提供連接性和IT服務。CESNET 集結了許多優秀的研究人員，以提供應用研究和網路應用開發方面的優秀成果。突破性成就包括，用於高速封包處理的IP核心，分別為10、40、100和400 Gbps。我們的400GE高度優化的FPGA智慧網卡已經在市場上販售了。封包處理和分析IP核心可以與任何FPGA的智慧網卡一起使用。我們的主要目標著重在高速網路監控、流量分析和網路安全。因此，我們開發了一套工具，如ipfixprobe、ipfixcol2和NEMEA框架等，以應對學術主幹基礎設施的高要求。此外，為了保護網路安全，我們也利用我們在機器學習方面的專業知識來改進安全檢測和防禦系統。

www.cesnet.cz

For more information, please contact: / 如需更多資訊，請聯繫：
Karel Hynek / hynekar@cesnet.cz



Czech Technical University In Prague



CTU in Prague, the oldest technical university in middle Europe, presents only selected research activities close to the scope of CyberSeC fair. This actual research scopes are organically transferred to study programs offered in English, too):

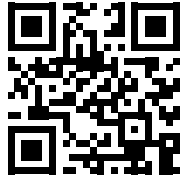
- Quantum key distribution R&D platform (Faculty of Electrical Engineering) for testing QKD devices, protocols, algorithms, KMS software, photonic device integration and student / expert training.
- Network Traffic Monitoring Lab (Faculty of Information Technology and CESNET) that focus on real-time encrypted network traffic analysis based on machine learning, detection of network security threats, and creation of extensive temporal network traffic datasets.
- Embedded Security Lab (Faculty of Information Technology) with main interest areas: Side-channel attacks and countermeasures, digital circuit design, FPGA design, reliability and dependability of cryptographic implementations, modelling, and simulation, security analysis of pervasive devices, probing security and post-quantum cryptography.

身為全中歐最古老的技術大學，捷克理工大學，在CyberSeC博覽會上展示了與會議範圍相關的研究活動，這些研究領域同時也是校內以英語授課的學程學位內容：

- 量子密鑰分發研發平台（電機工程院）主要是測試量子密鑰分發裝置、協議、算法、KMS軟體、光子裝置整合以及學生/專家培訓。
- 網路流量監控實驗室（資訊工程學院和CESNET）專注於機器學習的即時加密網路流量分析，檢測網路安全威脅，並建立的時間性網路流量數據庫。
- 嵌入式安全實驗室（資訊工程學院）主要領域包括：旁通道攻擊和對策、數位電路設計、FPGA設計、加密應用的可靠性和可信賴性、建模和模擬、普及式設備的安全分析、安全探測和後量子密碼學。

www.cvut.cz

For more information, please see: / 欲了解更多資訊，請參閱：
cvut@cvut.cz



CyberSecurityHub^{CZ}



CYBERSECURITY HUB is an expert cybersecurity organization founded by three universities (Masaryk University, Czech Technical University in Prague and University of Technology in Brno). The hub shapes the future through research cooperation, expert services, and the development of cutting-edge infrastructure.

Our services fall into 4 main categories - product or service testing, training and skills development, building an innovation ecosystem and support in finding investments, including advice for cybersecurity business development.

We provide these services at several levels, specializing in SMEs and public administrations. Their purpose is to support digital transformation and their provision is publicly funded. Clients of CyberSecurityHubcz therefore subscribe to them completely free of charge.

Check our projects:

- European Digital Innovation Hub - CyberSecurity
- Czech National Quantum Infrastructure
- CyberCampus^{CZ}

CYBERSECURITY HUB 是由三所大學 (Masaryk University、Czech Technical University in Prague 和 University of Technology in Brno) 共同創立的專家網絡安全組織。CYBERSECURITY HUB 透過研究合作、專家服務和先進基礎設施的開發一同塑造未來。

我們的服務分為四大類別——產品或服務測試、培訓和技能發展、建立創新生態系統以及尋找投資的協助，包括提供網絡安全發展的建議等。

我們提供的這些服務有分成幾個不同的層次，且對象通常是中小企業和公共行政部門。這個目的是支持數位轉型，且因為這個計畫是有公共資助，所以 CyberSecurityHubcz 的客戶可以不用支付任何費用，就能使用這些服務。

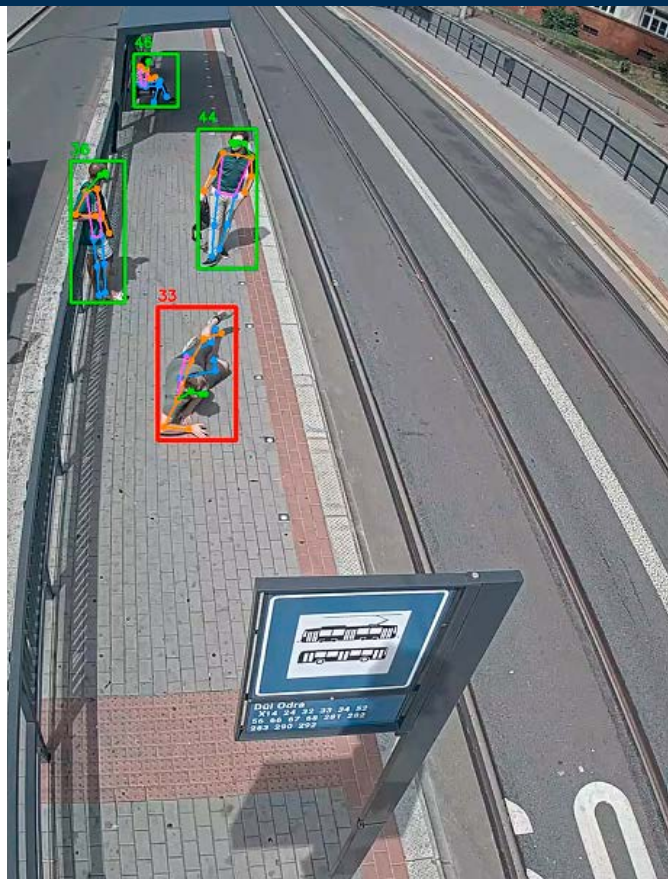
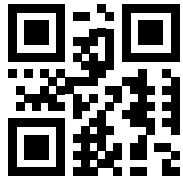
了解我們的企劃：

- European Digital Innovation Hub – CyberSecurity
- Czech National Quantum Infrastructure
- CyberCampus^{CZ}

www.cshub.cz

www.cybercampus.cz

For more information, please contact: / 如需更多資訊，請聯繫：
Roman Čermák / +420 549 496 314 / info@cshub.cz



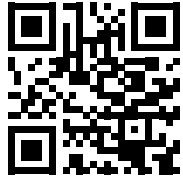
Eago Systems

We provide Software development and Digitization of the processes mainly for Armed forces, Insurance, Assistance companies, Logistics, Telecommunication, and Media. Our solutions include System for Assistance Services, AI Search for Missing People, Sensitive Asset Tracking, and Machine Vision based on AI Image detection. We service clients like Vienna Insurance Group, Global Assistance, the Police of the Czech Republic, the Ministry of the interior of the Czech Republic, T-Mobile, O2, and Magellan Aviation.

eago提供軍隊、保險和物流公司、媒體與傳播業等公司企業軟體發展和數位化的服務。例如建立AI搜尋失蹤人口系統，或是追蹤可疑資產流動的系統來滿足客戶的需求。我們的客戶範圍甚廣，從維也納保險集團、捷克警政署和捷克內政部到知名德國電信公司T-Mobile和知名英國電信公司O2等，都是我們服務的對象。

www.eago.cz

For more information, please see: / 欲了解更多資訊，請參閱：
hello@eagosystems.com



SPACEKNOW

SPACEKNOW



At SpaceKnow, we are at the forefront of automated satellite data analysis in precision-recall capability, multiple data source integration (UAVs, AIS...), and scalability. We are global leaders in the quality of AI-based algorithms thanks to an entirely in-house development process, including pixel-wise annotations, multiple machine-learning processes, and thorough testing. SpaceKnow has ten years of history of cutting-edge satellite data expertise which we offer to our clients through our unique, state-of-the-art SpaceKnow Guardian imagery intelligence analytical software product.

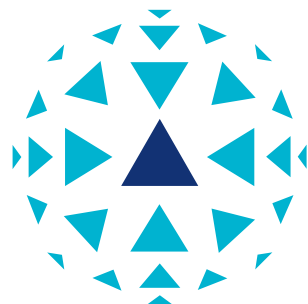
SpaceKnow是衛星資訊分析的先驅，有著許多資訊來源整合系統和分析能力。我們是以人工智慧演算法為基礎，加上機器學習的程序和不停地測試，SpaceKnow有超過十年的尖端衛星實務經驗和知識。讓我們的客戶都滿意的主打產品為 SpaceKnow Guardian影像智慧分析軟體，屬於同業中相當創新且獨特的商品。

www.spaceknow.com

For more information, please see: / 欲了解更多資訊，請參閱：
info@spaceknow.com

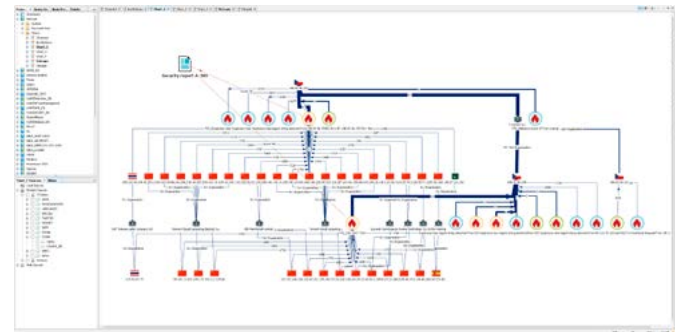


TOVEK



TOVEK

TOVEK PRODUCER OF A UNIQUE COMPREHENSIVE ANALYTICAL TOOL In the European context, we are a unique supplier of systems for analyzing structured and unstructured data for decision-making, intelligence, investigation, and defense. We represent a unique source of capabilities (we have our research and development capacities, we implement and adapt products to customers' specific needs).



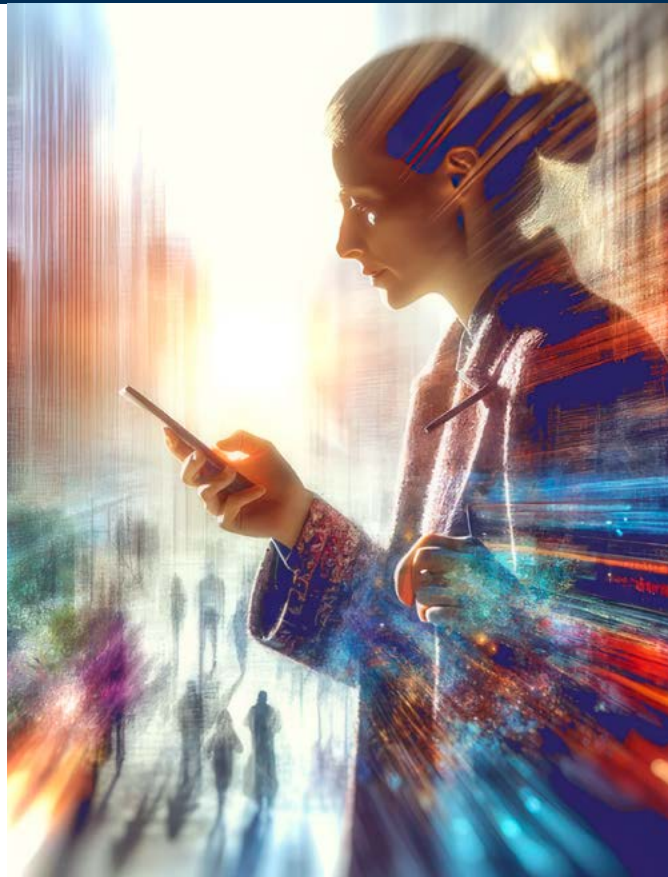
Customers in all security and defense sectors use our solutions as critical systems and operational tools for the ground forces, police, and security agencies. We provide training for highly specialized personnel/analysts working in defense and security, as well in the civilian sector. TOVEK is a producer and supplier of a software solution Analytical Research and Monitoring System Tovek (ARMS) for the entire security sector

of the Czech Republic, including other state cooperating units for more than 27 years. ARMS enables the coordination of analysis and information sharing between individual components in offline and online mode. ARMS is a Czech software solution independent of third parties, constantly evolving according to customer needs. ARMS is not a single-purpose solution. We provide our customers with a complete ARMS life cycle: standard deliveries and development of ARMS, including modifications according to customer needs, tailor-made development, testing, technical support, application support, TOVEK Academy - education of analysts, workshops, IMZ Our solutions' quality is also evidenced by the company's participation in the EDIDP (European Defense Industrial Development Program) project. We are the only Czech company that has succeeded. Specifically, we participate in the project PEONEER - Continuous observation of the Earth from space with an automated interpretation of information in real-time, including artificial intelligence. TOVEK will co-develop software that will support analysts in recognizing elements, subjects, and motion information through artificial intelligence; maritime and land applications to improve decision-making processes.

TOVEK 獨特的綜合分析工具的生產者 在歐洲，我們是分析結構化和非結構化數據以用於決策、情報、調查和防禦的系統的獨特供應商。我們代表著獨特的能力來源（我們擁有研發能力，我們根據客戶的特定需求實施和調整產品）。所有安全和國防部門的客戶都使用我們的解決方案作為地面部隊、警察和安全機構的關鍵系統和操作工具。我們為國防和安全以及民用部門的高度專業化人員/分析人員提供培訓。TOVEK 是為捷克共和國整個安全部門提供分析研究和監控系統 Tovek (ARMS) 軟件解決方案的生產商和供應商，其中包括其他國家合作單位超過27年。ARMS 能夠在離線和在線模式下協調各個組件之間的分析和信息共享。ARMS 是一個獨立於第三方的捷克軟件解決方案，根據客戶需求不斷發展。ARMS 不是單一用途的解決方案。我們為客戶提供完整的ARMS生命週期：ARMS 的標準交付和開發，包括根據客戶需求進行修改，定制的開發，測試，技術支援，應用支持，TOVEK 學院 - 分析師教育、研討會、IMZ 我們的解決方案的質量還通過公司參與 EDIDP (歐洲國防工業發展計劃) 項目得到了證明。我們是唯一一家取得成功的捷克公司。具體來說，我們參與了 PEONEER 項目——從太空持續觀察地球，並自動實時解釋信息，包括人工智能。TOVEK 將共同開發軟件，支持分析師通過人工智能識別元素、主題和運動信息；海上和陸地應用程序以改善決策過程。

www.tovek.cz

For more information, please see: / 欲了解更多資訊，請參閱：
info@tovek.cz



WHALEBONE

Whalebone is a cybersecurity company developing zero-disruption products for telcos, ISPs, and enterprises. It provides millions of internet users a seamless digital life protection, keeping them safe from malware, phishing schemes, ransomware, and other malicious digital attacks without the need to download anything. The company has repeatedly proven its potential by enabling T1 telcos to effectively protect their customers, while significantly raising their revenue. Whalebone has more than 400+ customers in telecommunications and corporate sectors around the globe and 100 team members with representation worldwide. Whalebone's mission is to bring cybersecurity to 1 billion people.

Whalebone是一家為電信公司、網路服務提供商和企業開發無干擾產品的网络安全公司。它為數百萬互聯網用戶提供了無縫的數字生活保護，保護他們免受惡意軟件、網絡釣魚、勒索軟件和其他惡意數字攻擊的威脅，而無需下載任何東西。該公司已多次證明其潛力，使 T1 級電信公司能夠有效保護其客戶，同時顯著增加其收入。鯨骨在全球電信和企業部門擁有 400 多名客戶和 100 名在世界各地的團隊成員。Whalebone 的使命是為 10 億人帶來網絡安全。

www.whalebone.io

For more information or follow us / 欲了解更多信息，請訪問 或在：
sales@whalebone.io
[@whaleboneio](https://twitter.com/whaleboneio) on Twitter (X) and LinkedIn.



捷克經濟文化辦事處
CZECH ECONOMIC AND CULTURAL OFFICE



czech taiwanese
business chamber

