VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ FAKULTA INFORMAČNÍCH TECHNOLOGIÍ

MINISTERSTVO VNITRA ČESKÉ REPUBLIKY

Příjemci podpory:

Vysoké učení technické v Brně
Fakulta informačních technologií

Poskytovatel:

Ministerstvo vnitra ČR

BAZAR: Budování komunity k problematice bezpeněženkových temných tržišť

Identifikační kód *VJ01030004*

Název předkládaného výsledku:

European Conference on Security Research in Cyberspace

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M uspořádání konference	M1	2022
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Stručná anotace k výsledku:

The main aim of the European Conference on Security Research in Cyberspace is to broaden our knowledge and to share information and experience in the field of cybernetic security in the Czech Republic and in the world. On the ocassion of the Presidency of the Czech Republic in the Council of the European Union, the conference will provide forums enhancing interconnection of the foremost researchres in the field of security research not only from Brno University of Technology and Masaryk University but also end users of the research results and representatvies of the state sector from the Czech Republic as well as from abroad. Another aim is to present the actual challenges and opportunities in this field and to discuss them, as well as to raise awareness about excellent results of the security research conducted by the Ministry of Interior, and to familiarize the conference members with the particular participants´ attitudes to the current form of the technological progress monitoring system and the system of implementation of research results into practice in the course of discussion. This event represents a unique opportunity to present cybernetic security research as a key part of the security research system in the Czech Republic.

Řešitelský tým:

Vladimír Veselý (hlavní řešitel a manažer), Daniel Dolejška, Olga Tesařová, Kristýna Ullmanová, Vladimír Jeřábek

mimo řešitelský tým za FIT pak ještě Michal Koutenský, Jan Zavřel

dále Jakub Dopieralla, Jan Vykoukal, Petr Číka, Jan Hajný, Václav Stupka, Veronika Bumbálková

EU-SecRes European Conference on Security Research in Cyberspace

The event is organised as part of the Czech Presidency of the EU Council. The conference is organised with the support of the Czech Ministry of the Interior's programme Strategic Support for the Development of Security Research in the Czech Republic 2019-2025 (IMPACT 1), projects VJ01030001, VJ01030002, VJ01030004 and VJ01030007.

MINISTRY OF THE INTERIOR OF THE CZECH REPUBLIC

MASARYK UNIVERSITY

BRNO UNIVERSITY OF TECHNOLOGY

NÚKIB

BRNO

TECHNOLOGY CENTRE CAS

SCHEDULE

Monday

September 12, 2022

SCALA UNIVERSITY CINEMA

Time	*Program*
12:00–12:30	**Check-in**
12:30–13:30	*Buffet lunch*
13:30–14:00	**Foreword** Minister of Interior, Rector of Brno University of Technology (BUT), Rector of Masaryk University (MU), Director of National Cyber and Information Security Agency (NÚKIB)
14:00–14:30	**Security Research Support Interdepartmental Conception** Jan Vykoukal, Director of the Department of Security Research, Czech Interior Ministry
14:30–15:00	**National Plan for Development and Research in the Field of Cybersecurity** Luboš Fendrych, Director of Department of Education, Research and Projects NÚKIB (The National Cyber and Information Security Agency of the Czech Republic)
15:00–15:30	**Opportunities of Security Research Support in Horizon Europe and Beyond** Wide Hogenhout, European Commission, DG CONNECT
15:30–16:00	*Coffee break*
16:00–16:30	**Presentation of the European Cybersecurity Competence Centre and Network and of the National Coordination Centre of the Czech Republic** Pascal Steichen, Chairman of the European Cybersecurity Competence Centre (ECCC), Jan Bečka, NÚKIB (The National Cyber and Information Security Agency of the Czech Republic)
16:30–17:30	**Keynote speech: Current Challenges in the Field of Cybersecurity – State of the Discipline, Challenges** Prof. Bart Preneel, KU Leuven
17:30–19:00	*Buffet dinner – Scala University Cinema*
19:00	**1st day – end of main programme**
19:00–21:00	*Optional accompanying programme- guided tour of the city of Brno*

SCHEDULE

Tuesday (Track 1)

September 13, 2022

BRNO UNIVERSITY OF TECHNOLOGY - FACULTY OF INFORMATION TECHNOLOGY

Time	*Program*
8:00–9:00	**Check-in, refreshments**
9:00–10:00	**Panel: Professional qualification in the Field of Cybernetic Security**
	MU FI (Masaryk University – Faculty of Informatics)
10:00–10:30	*Coffee break*
10:30–11:30	**Panel: Post-quantum Security and Formation of International Quantum Network**
	BUT FEEC (Brno University of Technology – Faculty of Electrical Engineering and Communication)
11:30–12:30	**Panel: Education and Prevention in Cybernetic Security**
	BUT FEEC
12:30–14:00	*Buffet lunch*
14:00–15:00	**Cyber Criminality and Digital Investigation**
	BUT FIT (Brno University of Technology – Faculty of Information Technology)
15:00–15:30	*Coffee break*
15:30–16:30	**Speech Mining**
	BUT FIT
16:30–17:30	**Safe Artificial Intelligence**
	MU FI (Masaryk University – Faculty of Informatics)
17:30–18:00	*Coffee break*
18:00–19:00	**Image Processing and Security**
	BUT FIT
19:00	**Gala dinner**

SCHEDULE

Tuesday (Track 2)

September 13, 2022

BRNO UNIVERSITY OF TECHNOLOGY - FACULTY OF INFORMATION TECHNOLOGY

Time	*Program*
8:00–9:00	**Check-in, refreshments**
9:00–10:30	**Roundtable: Foresight for (Cyber)secure Future** Technology Centre, Czech Academy of Sciences (TC CAS), Ministry of the Interior of the Czech Republic
10:30–11:00	*Coffee break*
11:00–12:30	**Roundtable: Ways of application of research results and technologies in practice** Technology Centre, Czech Academy of Sciences (TC CAS), Ministry of the Interior of the Czech Republic
12:30–14:00	*Buffet lunch*
14:00–15:00	**Tools to Support Security Research – Overview of National Programs of Security Research** Ministry of the Interior of the Czech Republic
15:00–15:30	*Coffee break*
15:30–17:00	**Cybersecurity Research Support in Horizon Europe programme** Technology Centre, Czech Academy of Sciences (TC CAS), Trilateral Research
19:00	**Gala dinner**

SCHEDULE

Wednesday

September 14, 2022

BRNO UNIVERSITY OF TECHNOLOGY - FACULTY OF ELECTRICAL ENGINEERING AND COMMUNICATION

Time	*Program*
8:00–9:00	**Check-in, refreshments**
9:00–9:20	**Welcome at FEEC BUT** prof. Ing. Jaroslav Koton, Ph.D., Vice-Dean for Science and Research
9:20–10:00	**National Programs** Roles of application guarantees / user organisations, introduction of application guarantees and their needs (Michaela Ceklová (MVČR), representatives of NÚKIB, Police and HZS)
10:00–10:30	**European Programs** Searching partners for Horizon Europe consortia (Lenka Švejcarová, TC AV), Introduction of European Defence Fund (EDF) and the process of proposal creation and evaluation (Kateřina Stejskalová, AOBP)
10:40–11:00	**Discussion, matchmaking with coffee/refreshments**
11:00–12:30	**Presentation of BUT FEEC Laboratories and Other Premises of the Organizing Universities MU FI + BUT FIT** It is necessary to register in advance. The tours are connected with the presentation of excellent security research projects in the field of cybersecurity. BUT FEEC: Quantum Security Laboratory, 5G+ Laboratory, IoT Laboratory, CyberGrid BUT FIT: Computer Networking Laboratory MU FI: KYPO cybernetic polygon
12:30	**Closing of the conference**

SPEAKERS

Keynote Speaker

BART PRENEEL is a full professor in the COSIC research group in the Department of Electrical Engineering at the Katholieke Universiteit Leuven in Belgium, former president of International Association for Cryptologic Research (IACR) and manager of the ECRYPT project. He is also the principal investigator of numerous research projects funded by European programs. With more than 28K citations and h-index over 80, prof. Preneel is one of the most significant researchers in cryptography and information security.

Moderator

ONDŘEJ KRÁTOŠKA has worked as a sports commentator for Eurosport, a moderator of conferences, sporting and cultural events since 1998. Since 2016, he serves as the press secretary of the Ministry of the Interior of the Czech Republic.

Speakers

JAN BEČKA employed at the National Cyber and Information Security Agency since 2021, his primary focus lies in the cooperation in the realm of cybersecurity research and development on the national and European level. He coordinates the establishment of the National Coordination Center, which is part of a network of centers collaborating with the European Competence Center for Research and Development in the area of Cybersecurity.

SPEAKERS

MICHAELA CEKLOVÁ works in the Security Research Unit of the Department of Security Research and Police Education as a senior analyst for research, development and innovation. She mainly deals with program management of security research at the Ministry of the Interior of the Czech Republic. Her areas of interest are the preparation and evaluation of security research programs, the correlation of security research and science policy of the Czech Republic, and the implementation of security research results. She is a member of the Horizon Europe program committee, Cluster 3 Civil Security for Society. She studied security and strategic studies at the Faculty of Social Studies of Masaryk University.

JAN ČERNOCKÝ is full professor and Head of the Department of Computer Graphics and Multimedia at the Faculty of Information Technology, Brno University of Technology. He serves as managing director of BUT Speech@FIT research group. His research interests include artificial intelligence, signal processing and speech, speaker and language recognition. In the past 20 years, he led and participated in numerous research projects funded by US DARPA, IARPA, European framework programs, Czech funding agencies and industry. At FIT, he is responsible for signal and speech processing courses. In 2006, he co-founded Phonexia. He was general chair of Interspeech 2021 in Brno.

PETR ČÍKA works as an associate professor and secretary at the Department of Telecommunications at the Faculty of Electrical Engineering and Communication Technologies, Brno University of Technology. Research activities include communication technologies, cybersecurity and cybersecurity certification. Assoc. Prof Číka is team leader of national applied research projects dealing mainly with cybersecurity and communication in critical infrastructure. In addition to research activities, he teaches in the field of communications technologies and multimedia services.

SPEAKERS

FABIO DI FRANCO is working for ENISA since 2017 and is currently leading the activities in ENISA on cyber skills development for highly skilled people, with the development of the European cybersecurity skills framework. He is also responsible for developing skills in the EU member states and EU institutions through trainings and exercises for cybersecurity professionals. Fabio has worked more than 15 years in public and private organizations and has a master and a PhD in telecommunication engineering. He is a frequent speaker to conferences and events and an advocate in order attract new talents to cybersecurity.

MILOSLAV DUŠEK is a professor of physics and a vice-dean at the Faculty of Science of the Palacký University in Olomouc. He achieved his PhD in 1994 at the Charles University in Prague. His scientific interests cover quantum optics, foundations of quantum theory, quantum cryptography, quantum information processing, and quantum technologies. In the 1990s, he was involved in the development of a laboratory prototype of a fully functional device for quantum key distribution.

MILOŠ DVOŘÁK has been with the National Cyber and Information Security Agency since August 2017 and previously worked at the National Security Authority since its inception. He is the head of the Cryptology and Cryptologic Resource Development Unit of the NCISA and therefore he primarily works on applied cryptography and development of cryptographic resources. His main focus is on the practical application of cryptography, information and communication security and on the protection of communication and mobile technologies. He is a graduate of the Faculty of Technical Engineering of the Czech Technical University in Prague.

MARTIN FAŤUN is working in department of strategic studies of the Technology Centre CAS as an analyst and project manager. He concentrates primarily on information and communication technologies, security and foresight issues. In the Technology Centre he works since 2006. Previously Martin was engaged in computer programming and database applications development. Afterwards he entered IDG Czech publishing house, where he gradually occupied positions of expert editor and editorial director of Computerworld weekly and Business World monthly. Martin graduated from the Faculty of Mathematics and Physics of the Charles University in Prague in field of mathematical informatics, theoretical cybernetics and system theory, with focus on automatic computers and programming.

SPEAKERS

LUBOŠ FENDRYCH employed at the National Cyber and Information Security Agency since 2018, currently as the Head of the Department of Education, Research and Projects. In the area of research, he focuses on the involvement of the Agency in national and international projects, and has also participated in the creation of the National Plan of Research and Development in Cyber and Informational Security.

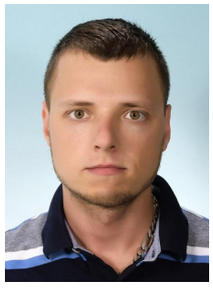
FLORIAN FRÖWIS is a quantum physicist by training (Ph.D. in 2012 from the U. Innsbruck) with several years of postdoc experience at the U. Geneva. He joined ID Quantique in 2018 to take care of collaborative research projects, mainly with European academic and industry partners. In 2022, he became General Manager of ID Quantique Europe, a Vienna-based company with the mission to protect the European critical infrastructure with QKD.

JAN HAJNÝ works as an associate professor at the Faculty of Electrical Engineering and Communication at Brno University of Technology. He is the head of the Brno Applied Cryptography & Security Engineering group, member of the faculty's Scientific Committee and the person responsible for the Information Security study programs. The scientific activities of prof. Hajny include research into modern cryptography and privacy protection. Prof. Hajny is the principal investigator of many projects, including Czech grants (GAČR, TAČR, MVČR, MPO, MŠMT) and international projects (Horizon 2020, Horizon Europe, Digital Europe). He leads the SPARTA WP9 Cybersecurity Training and Awareness group, contributes as a member to the ENISA EU Cybersecurity Skills Framework group, leads the Quantum security lab at BUT and participates on the Czech national quantum infrastructure creation.

ADAM HEROUT is a full professor at the Brno University of Technology, Faculty of Information Technology, Czech Republic. His research interests include computer vision and its applications, mostly focused on surveillance and intelligent traffic systems.

SPEAKERS

WIDE HOGENHOUT works in the Cybersecurity Technology and Capacity Building Unit of the Directorate-General for Communications Networks, Content and Technology of the European Commission. He did his PhD at the Nara Institute of Science and Technology in Japan, and has a background in computer science. After working in industry for several years, he joined the European Commission in 2004. Until 2020 he worked for in the area of Future and Emerging Technologies, including in particular the Graphene Flagship. Today he focusses in particular on the Digital Europe programme and other actions in the area of cybersecurity.



TOMÁŠ HORVÁTH is a member of the Fiber Optic group at the Faculty of Electrical Engineering and Communication at the Brno University of Technology (BUT) and CESNET a.l.e., Czech Republic . Research activities of Dr. Horvath include the security of fiber-optic infrastructures, high-speed transmission of data over fiber-optic infrastructures, and optical access networks. He is a researcher in several Czech scientific projects focused on cybersecurity and GÉANT EU project.

HANNES HÜBEL obtained his PhD in 2004 from Queen Mary, University of London, UK. In the same year he joined the quantum information group at the University of Vienna. After several years in Canada and Sweden, he joined the AIT Austrian Institute of Technology in 2015. He currently holds the position of a Thematic coordinator for all Quantum Technology activities at the AIT. As senior scientist he is also responsible for the experimental QKD development at the AIT. He is very much involved in the European Quantum Technology Flagship effort as coordinator of the UNIQORN project as well as the OPENQKD project. Besides his scientific work, he is also consulting the European Commission on the deployment plans for its large quantum communication initiative, the EuroQCI. He furthermore coordinates all QKD developments within Austria and the cross-border activities with neighboring countries for the EuroQCI initiative, as well as participating in the EuroQCI architecture studies QSAFE and SAGA PHASE-A for the terrestrial and satellite part of the European quantum communication network.

SPEAKERS

RASTISLAV JANOTA (National Cyber Security Center SK-CERT, Director) has more than 20 years of experience in the IT and telecommunications sectors. During his professional career, he has held several expert and top management positions in the field of ICT and cyber security, both in private sector and state administration, both in Slovakia and various countries abroad. Since january 1 2016 he has been the chairman of the newly created Committee for Cyber Security of the Security Council of the Slovak Republic. And since July 1, 2016, after joining the National Security Office, he manages the area of cyber security where he created and manages the National Center for Cyber Security SK-CERT.

SILVIA JIRÁSKOVÁ has long been involved in supporting the overall development of young technology-oriented companies at the Technology Centre CAS and leads the Scale-up your business mentoring programme. She helps prepare companies for negotiations with private investors and has a broad overview of funding opportunities from national and European programmes. She helps companies to navigate through these programmes, identify suitable sources, including mentoring in the preparation of project plans. Silvia graduated from the Faculty of Chemical Technology at STU in Bratislava. Prior to joining the Technology Centre CAS in 2015, she worked in sales and business development in the chemical and pharmaceutical sectors, preparing and managing a number of successful educational projects funded by structural funds. Since January 2022, she has been the Head of the Department of Business Development and Coordinator of the Enterprise Europe Network Czech Republic consortium.

HEIKKI KÄLVIÄINEN is a full professor of Computer Science and Engineering at the Lappeenranta-Lahti University of Technology LUT, School of Engineering Science, Finland. Prof. Kälviäinen is a head of the Computer Vision and Pattern Recognition Laboratory at the Department of Computational Engineering. His research interests include computer vision, pattern recognition, machine learning, and especially applications of digital image processing and analysis. Besides LUT, Prof. Kälviäinen has worked more than six years in other universities: as a Professor of Computing at School of Information Technology of Monash University Malaysia and as a Visiting Professor at the Faculty of Information Technology of Brno University of Technology, Czech Republic, the Center for Machine Perception (CMP) of Czech Technical University, and the Centre for Vision, Speech, and Signal Processing (CVSSP) of University of Surrey, UK.

SPEAKERS

TOMÁŠ KUBALA has worked in the area of engineering (from consulting to production and managing) his whole life, particularly in the automobile industry. Graduated from the Brno University of Technology in 1994 (Faculty of Mechanical Engineering, specializing in Quality Control). Afterwards, he studied and worked in Japan for two years, and has continued to return there professionally since then. Spent a part of his career in a multinational company, and afterwards worked in a Czech private company. He has shared his gained experiences for a long time in the area of consulting, especially in the areas of quality control, increasing effectiveness, competitiveness and innovation implementation. Since 2018, he has been the Chairman of the Board and executive director of INDUSTRY CLUSTER 4.0, which focuses its activities towards supporting modernization and digitalization of production processes for small and medium-sized companies. Since 2018, he´s also been a member of the Scientific Council of the National Centre of Competence in Cybersecurity, where he formulates the demands of industry in the area of cybersecurity. Since 2020 he has been the Deputy Chairman of the Board of the Brno Regional Chamber of Commerce, where he is responsible for the topics of Industry 4.0, digitalization, cybersecurity and cooperation with clusters.

RADIM KUDLA has gained extensive knowledge of IT solutions architecture and topology, audio processing, speech analytics and voice biometrics deployments, business strategies and subsidy consulting services in his career. Radim participated in several research and development IT projects co-financed by European Commission or national funding. He also gained experience of product management and go-to-market with IT solutions.

SPEAKERS

QUENTIN LADETTO is research director at armasuisse Science and Technology where he started the Technology Foresight program, also known as deftech (Defence Future Technologies) – https://deftech.ch. The goal of the program is to identify disruptive technology trends and anticipate their use cases that will have an impact on how Switzerland's security is defended and preserved. After a PhD in Geomatics from the Swiss Institute of Technology in Lausanne (EPFL), Quentin joined Safran Vectronix AG to industrialize the pedestrian navigation system developed during his thesis, which would be then selected to be part of the US Land Warrior military program. Prior to joining armasuisse he worked with different start-ups companies helping developing various hardware and software solutions in the fields of Internet mapping, fleet and assets management and the Internet of Things (IoT). In parallel Quentin completed an Executive MBA in management and corporate finance from HEC Lausanne and a diploma in Technology Management from IMD Lausanne.

MARIA LEITNER is Professor of Computer Science (Process-oriented Informaation Systems) at the Research Group Workflow Systems and Technology, Faculty of Computer Science at the University of Vienna.

SPEAKERS

PAVEL LOUTOCKÝ is a lawyer, researcher and head of section at the Faculty of Informatics, Masaryk University, where he works within the Centre of Excellence focusing on issues related to cybercrime, cybersecurity and protection of critical information infrastructures. He is also a researcher at the Institute of Law and Technology, Faculty of Law, Masaryk University and a lecturer within the Cyber Security study programme at the Faculty of Electrical Engineering and Communication Technologies, Brno University of Technology. Apart from cybersecurity and cybercrime, his main areas of interest are electronic identification and electronic documents, online consumer protection, online dispute resolution, online platforms, electronic contracting, domain names, eJustice & eGovernment and international aspects related to some of these areas. He has completed a year of studies at the University of Abertay, Dundee, Scotland and a PhD at the Institute of Law and Technology, Masaryk University, Faculty of Law. Since 2012, he has been a regular member of selected working groups within the United Nations Commission on International Trade Law (UNCITRAL). He is also an external lecturer at the Queen Mary University of London and Georg-August-Universität Göttingen.

ALEKSEJ MAKAROV is Director of Scientific Cooperation and a former CTO at the Vlatacom Institute of Technology. He was responsible for one of first eID projects globally, which is the cornerstone of today's e-government services in Serbia. This experience has been transferred to the protection of data and access authentication in numerous Vlatacom projects in Asia, Latin America and Africa, in the area of national ID, border control, traffic control and secured communication systems. His current cyber-security interests focus on secret key agreement over public channels. He previously worked at various positions with STMicroelectronics, Orange Communications, The European Patent Office and the University of Oxford. He graduated in Electrical Engineering from the University of Belgrade, and received his PhD degree in telecommunications from the Swiss Institute of Technology (EPFL).

SPEAKERS

LUKÁŠ MALINA is an Associate Professor at the Department of Telecommunications at Brno University of Technology (BUT), Czech Republic. For more than ten years, he focuses on cybersecurity, applied cryptography, privacy-preserving protocols, and authentication systems. Further, he deals with post-quantum cryptography and system and device security. He has published more than 90 papers in international journals and conferences, and he has provided several invited research and teaching lectures at universities in Europe. Assoc. Prof. Malina is involved as a senior researcher and team leader in several European and Czech scientific projects focused on cybersecurity.

MIROSLAV MAREŠ is professor at Faculty of Social Studies of the Masaryk University in Brno, responsible for the study program security and strategic studies. He studied political science (1997) and law (1999) at the MU. He focuses on the research on security policy, extremism and terrorism, namely in the Central and Eastern European context. He was an advisor of the National Security Audit of the Czech Republic (2016) and recently he is a member of expert pool of the European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE). He is a co-author (with Daniel Novák) of the commentary on the Constitutional Act on the Security of the Czech Republic (Wolters Kluwer 2019).

PETR MATOUŠEK is Associate Professor at the Faculty of Information Technology, Brno University of Technology, Czech Republic with focus on computer networks, cyber security, monitoring and analysis of network communication. His research activities include anomaly detection of security incidents in industrial networks, analysis of encrypted communication, monitoring and management of IoT. He participated in the development of the Computer Network Research Lab at FIT. Petr externally teaches for Strathmore University in Kenya.

KRISTÝNA MEISLOVÁ works in the Strategic Studies Department of the Technology Centre of the CAS as a Senior research analyst and Innovation project manager. She focuses on developing and cultivating internal and external innovation ecosystems. Her working domains are horizon scanning, technology foresight, and design and evaluation of innovation strategies. Kristýna holds a master of science degree in Social Geography and Regional Development from Charles University in Prague.

SPEAKERS

LUDĚK MORAVEC currently serves as Science and Technology Attache at the Czech Embassy in Washington, DC. Ludek graduated in International Area Studies at Charles University in Prague, CZE, holds MSc in Strategic Studies and Intelligence from the University of Aberystwyth, UK. Between 2007 and 2012 worked with the department of security studies, Charles University in Prague and after a short stay with NATO, he transferred to the Ministry of the Interior to support its analytics and programme management efforts in homeland security research. Ludek took over his current assignment in 2017 in order to establish the science diplomacy line of work in the USA, with an emphasis on defense research collaboration. He remains active in homeland security research in an advisory capacity both in CZE and EU.

PETR MÜNSTER is an associate professor and head of the Fiber Optic group at the Faculty of Electrical Engineering and Communication at the Brno University of Technology (BUT), Czech Republic. Research activities of Assoc. Prof. Münster include the security of fiber-optic infrastructures, fiber-optic sensors, and transmission of data and non-data services over fiber-optic infrastructures. He is a senior researcher and team leader in several Czech scientific projects focused on cybersecurity. He also participates in the operation of the Quantum security lab at BUT.

MICHAL PAZOUR is head of the Strategic Studies Department and deputy director for strategy at the Technology centre of the Czech Academy of Sciences. He specializes in evaluations, analyses and foresight-based design of research and innovation policies. Michal is an author or co-author of numerous analytical and policy studies prepared for the Czech government, European Commission, European Parliament or OECD. Before joining the Technology Centre in 2007, Michal worked as an innovation policy analyst at the Czech Ministry of Industry and Trade. Michal holds a PhD in economic policy from the University of Economics in Prague.

SPEAKERS

EDMUNDAS PIESARSKAS is an expert at Lithuanian Cybercrime Center of Excellence for Training, Research & Education (L3CE) working in the field of cybersecurity. Experience in cybersecurity was build working in several projects, varying from development of competence communities to constructing comprehensive cybersecurity models. Main areas of expertise include education and training in cybersecurity, innovation uptake issues, cyber component in hybrid threats context. He is also a member of ENISA ad-hock working group for development of European Cybersecurity Skills Framework.

TOMÁŠ PITNER is a professor at Masaryk University, Faculty of Informatics where he acts as the Academic Director at Center for Research and Education in IT (CERIT) and Head of the Lasaris Research Lab. Since 2007, he has worked as an external professor at the Faculty of Computer Science at University of Vienna. His research focuses primarily on cybersecurity, critical infrastructures, namely for power grids, e-health applications, enterprise software architectures and technologies. He also deals with the communication aspects of academic and industrial cooperation as well as qualifications and professional growth of experts in IT, particularly in cybersecurity. He leads large-scale applied and contractual research projects and drives the academic activities within the Cybersecurity Innovation Hub under the Digital Europe. He also acts as the Secretary of International Advisory Board at National Competence Centre for Cybersecurity (NC3) since 2019, and he led Research Program at Czech CyberCrime and Critical Information Infrastructure Protection Center of Excellence (C4e).

RADIM POLČÁK is the head of the Department of Law and Technology at the Faculty of Law in the Masaryk University in Brno. As a guest, he regularly lectures at law schools and judicial training institutions in Europe and USA. His research focuses on legal theory, information and communication technology (ICT) law and energy law. He is also arbitrator of the tribunal for .eu and .cz domain names, a founding member of the European Academy of Law and ICT. He has published over 150 professional articles, chapters in professional books, conference papers and monographs in the fields of legal theory, ICT law and energy law.

SPEAKERS

PARESH RATHOD is a seasoned technocrat, cyber expert, educator and innovator. Currently, he is serving as an international cyber expert at Laurea-Finland, co-chair of the European Cybersecurity Organisation working group-5 and European Cybersecurity Agency (ENISA) expert-rapporteur in AHWG (European Cybersecurity Skills Framework) and vice-president IITEDA (UK). His expertise adding values in the European innovation projects and development work including ECHO, CyberSecPro, EU-HYBNET, ECOLHE and many projects. His development work and projects are contributing towards the goals of the European cyber secure societies and European digital single market. Paresh has trained more than 10 thousand students and professionals in the Finland alone. Paresh Rathod's prime focus of the development includes integration of research, development and innovation projects within higher-professional education, society and businesses.

ONDŘEJ RYŠAVÝ is an associate professor at the Brno University of Technology. He specializes in cybersecurity and digital forensics. He has led numerous R&D projects and conducted collaboration with industrial partners in the area of system and network security, in particular, security network monitoring, threat detection, and industrial system cybersecurity.

PETR SEIFERT has been working at the National Office for Cyber and Information Security since 2021 as Head of Education. He deals with awareness, education, prevention, professional qualifications and competences in the field of cyber security.

SPEAKERS

MARK SCANLON is an Associate Professor in the UCD School of Computer Science, Founding Director of the UCD Forensics and Security Research Group, Programme Director of the Masters in Forensic Computing and Cybercrime Investigation and Principal Investigator at Ireland's National Centre for Applied AI (CeADAR). He is a Fulbright Scholar in Cybersecurity and Cybercrime Investigation. Both his MSc and PhD are in the field of Remote Digital Forensic Evidence Acquisition and Analysis. His research interests include Remote Evidence Acquisition, Evidence Whitelisting & Data Deduplication, Cloud Forensics, File Synchronisation Service Forensics, Network Forensics, and Digital Forensics Education. Dr. Scanlon is an active member of the digital forensics research community and is a keen editor, reviewer and conference organiser across a range of key journals and conferences in the field.

PASCAL STEICHEN is founder and CEO of SECURITYMADEIN.LU, the Cybersecurity Agency for the Luxembourg Economy and Municipalities. For more than 20 years, he has been involved in the main cybersecurity initiatives of the Luxembourg Government, in order to foster and empower CYBERSECURITY Luxembourg, the national cybersecurity ecosystem. Building on his huge experience in cybersecurity, today, among others, Pascal is member of the Luxembourg Cybersecurity Board, lecturer in information security at the University of Luxembourg, board member of CLUSIL (the main association representing the cybersecurity landscape of Luxembourg), member of WomenCyberForce, and involved in the curricular board of the BTS cybersecurity. Since February 2022, he is the Chair of the European Cybersecurity Competence Centre (ECCC).

KRISTÝNA STEJSKALOVÁ is the Associate Director of the Defence and Security Industry Association of the Czech Republic (DSIA), which associates companies dealing with research, development, manufacturing, trade and marketing of defense and security technology, material and services. Kristýna Stejskalová is also the Czech defence minister´s nominee to the post of the National Focal Point of the European Defence Fund, is a member of the NATO Science and Technology Board (STO), and the deputy director of the Czech delegation to the NATO Industry Advisory Group (NIAG). She also lectures about international security at the Prague University of Economics and Business.

SPEAKERS

TEREZA ŠAMANOVÁ As a lawyer with large regulatory experiences from working within the Governmental bodies as well as NGO sector, she was among the founders of CzechInno Association in 2011 and currently serves as its Member of the Board and Executive Director. From 2017, she is also coordinator of Central European Platform for Digital Innovations CEEInno grouping stakeholders active in the digital innovation implementation in CEE region – and, among others, also all the currently registered Czech Digital Innovation Hubs. In 2019, within the CEEInno Platform crystallised consortium of Hub for Digital Innovations (H4DI) DIH, where Tereza serves as an executive representative. She also collaborates as an expert with Cybersecurity Innovation Hub as one out of the five selected Czech European Digital Innovation Hub. She has also administrated the Czech DIH Community within DIHNET Project and was inaugurated into position of DIHNET Project and I4MS Initiative Ambassador. She is one of the members of the authors' team of the Czech National Initiative Industry 4.0, of several governmental advisory bodies for research, innovations and digital agenda, of a research team charged with elaboration of expert studies for the Czech Government in the field of Society 4.0 and a legal expert in the field of data protection in the digital age and regulatory aspects of digital economy. She is an active lecturer and author of expert publications in this field.

LENKA ŠVEJCAROVÁ works at the Technology Centre CAS as a national contact point for Horizon Europe research and innovation programme (HE). She focuses on security research and the digital area, i.e. Cluster 3 and Cluster 4 sub-programmes of HE. She also has the role of a national delegation member to the HE programme committees in European Commission. Lenka manages the IDEAL-IST and SEREN projects supporting the cooperation of European national contacts. Before joining the Technology Centre CAS she worked as a grant project manager at the Czech University of Life Sciences in Prague. In her previous jobs in Czech Airlines and later Telefónica Global Solutions, she was engaged in several international projects as a data analyst and reporting specialist.

SPEAKERS

LYUDMYLA TYSYACHNA works in the Technology Centre CAS as the Czech National Contact Point (NCP) for researchers applying to European Research Council (ERC) and Marie Skłodowska-Curie Actions (MSCA) calls in the EU's Horizon Europe Framework Programme. She represents the Czech Republic as a delegate in discussions with the European Commission in the Programme Committees of both parts of Horizon Europe. Previously, she occupied the position of Head of the European Research Area Section at the Czech Academy of Sciences Head Office. In the past, she was also involved in internationalisation of Czech higher education sector and in promotion of international development cooperation in education. She graduated from the Faculty of Social Studies, Masaryk University, in the field of International Relations.

VLADIMÍR VESELÝ works as an assistant professor for Computer Networks at Brno University of Technology since 2017. His research involves: 1) cryptocurrencies and practical deployment of blockchain-based technologies; 2) modelling and simulation of complex systems; and 3) large-scale routing/switching networking designs. He regularly assists law enforcement agencies in tracking cryptocurrency assets involved with illicit activities and identifying their owners. He co-founded company called Netsearch, which researches and develops specialized solutions for cryptocurrency forensics, password recovery, traffic interception and decoding.

JAN VYKOUKAL has been working at the Ministry of the Interior since 2000. He has served as the head of the Department of Security Research of the Ministry since 2008. Jan Vykoukal participated in the creation of crucial conceptual and strategic documents in the area of security research. He is a member of multiple advisory bodies for the Interior minister responsible for the running of programs of public support for security research.

ROBERT WOODWARD is a Research Scientist and Team Leader at the Cambridge Research Laboratory (UK) of Toshiba Europe Ltd. His research investigates new fibre-based QKD technologies and their integration into existing network infrastructure, alongside working on the development of Toshiba's new QKD products. Prior to this, he worked in academia in both the UK and Australia, researching nonlinear fiber optics and ultrafast laser physics.

SPEAKERS

DAVID WRIGHT founded Trilateral Research in 2004. David wrote and won his first two EU projects on the topics of ambient intelligence and risk communications respectively, topics that have continued to permeate many of TRI's other EU-funded projects. David is a prolific writer, continually expanding TRI's areas of research through his work and thought leadership. He has been the principal author for many of TRI's winning proposals. He currently co-ordinates the EU-funded (H2020) CC-DRIVER project on the human and technical drivers of cybercrime. He has published more than 70 articles in peer-reviewed journals; he has co-edited and co-authored four books, including Privacy Impact Assessment (Springer, 2012) and Surveillance in Europe (Routledge, 2015). He coined the term and published the first article on ethical impact assessment. He has participated in several foresight expert groups, including four ENISA expert groups and a DG Research Trust-at-Risk foresight group. He has developed several scenario construction methodologies, including policy scenarios for the EU-funded SHERPA project as well as "dark scenarios", a term he coined in the SWAMI project. He is a member of the European Foresight Monitoring Network and a freelance member of the faculty of Law Science.

PAVEL ZEMČÍK is the dean of the Faculty of Information Technology, Brno University of Technology. Previously he worked as a head of department of Computer Graphics and Multimedia at the same faculty, visiting professor at PennState, Behrend College, Erie, PA. USA, researcher at Lappeenranta University of Technology, Finland, at University of Surrey, UK, and at University of Bristol, UK. He is interested in research and teaching of image processing, computer graphics, and computer vision as well as their applications, security aspects and acceleration in hardware. He is author or co-author of over 180 scientific publications including papers at renowned international scientific conferences and in international journals. He participated on development of over 30 functional samples and software tools, 5 patents, and products, such as visual inspection systems in industry or traffic enforcement, in which cybersecurity plays an important role.

SPEAKERS

JIŘÍ ZLATUŠKA is a Czech computer scientist, university professor and former politician. He currently serves as the Dean of the Faculty of Informatics of Masaryk University, which he founded before his election as Rector of Masaryk University in 1998, where he was instrumental in the implementation and promotion of the entire University information system and in the preparation of the implementation of the Bohunice University Campus in the form of the then largest investment by the European Investment Bank outside the then EU. Jiří Zlatuška graduated from the Faculty of Science of Masaryk University in 1981 with a degree in Mathematical Computer Science and Theoretical Cybernetics. In 1994, he founded the Faculty of Computer Science at Masaryk University, which he headed until 1998 and then, after the end of his rectorial mandate, in 2004-2011 and again since 2015. He has worked on conceptual modelling of information systems, lambda-calculus, logic programming and computational logic, computer typography and the wider societal implications of informatics and computerisation.

MOTI ZWILLING is a staff member of the Economics and Business Administration at Ariel University. He completed his doctoral studies in bio-infotermatics in 2008 at Hebrew University under the guidance of Prof. Shai Arkin of the Biological Chemistry Department, and Prof. Nati Linial of the Computer Sciences Department. In addition, he completed his doctorate in Marketing (which dealt with application of learning algorithms to solve problems in the advertising field) in 2007, under the guidance of Prof. Gila Fruchter of Bar Ilan University, School of Economics and Business Administration. In 2010 he served as a post-doctoral student for one year in the Systems Information Engineering Department at Ben-Gurion University, under the guidance of Prof. Lior Rokach. In the post-doctoral framework, he worked in the research laboratories of Deutsche Telekom in the field of information security, in the project: "Identifying keyboard characteristics and behavior characteristics of Internet surfers" through application of learning algorithms.

Talks

Security Research Support Interdepartmental Conception

Monday, September 12, 2022, 14:00–14:30

- Jan Vykoukal, Director of the Department of Security Research, Czech Interior Ministry

The Interagency Security Research Support System Policy of the Czech Republic 2017-2023 with a view to 2030 is the general framework for the systematic development of the system of public support for security research, development and innovation as an integral part of the research, development and innovation policy specifically realized to the advantage of the security system of the Czech Republic. The key principle guiding the management of the support system is the specific link to the security system of the state, an effort to utilize the existing research capacities in a rational way via complementary programs of public support, the need to utilize the full potential of bilateral and multilateral international cooperation; all of this on the condition of social responsibility in the approach to the security research agenda. Security research develops the abilities of security forces and reacts to current societal needs in the realm of security. In the scientific context, it facilitates communication between the research and end-user environments. The key characteristics of security research as laid out in the presentation include specific aims, determined by the wide spectrum of security benefits, and a focus on security threats.

National Plan for Development and Research in the Field of Cybersecurity

Monday, September 12, 2022, 14:30–15:00

- Luboš Fendrych, Director of Department of Education, Research and Projects NÚKIB (The National Cyber and Information Security Agency of the Czech Republic)

The National Cyber and Information Security Agency (NÚKIB) is the central administrative body for cyber security, including the protection of classified information in communication systems and cryptographic protection. Based on the National Cyber Security Strategy of the Czech Republic, NÚKIB also serves as the national contact point for coordination of R&D activities in respective areas. To create the strategic framework for R&D activities in the Czech Republic, NÚKIB has published The National Plan for Research and Development in Cyber and Information Security 2022 – 2025.
The Plan identifies research priorities in cyber and information security. The next goal is to strengthen cooperation between academic, private and public sectors in R&D and to ensure technological transfer. Lastly, it focuses on effective cross-border cooperation and strengthening the role of the Czech Republic in the European Research Area.

Talks

Opportunities of Security Research Support in Horizon Europe and Beyond

Monday, September 12, 2022, 15:00–15:30

- Wide Hogenhout, European Commission, DG CONNECT

The European Union works on various fronts to promote cyber resilience, safeguarding our communication and data and keeping online society and economy secure. The European Commission and the High Representative of the Union for Foreign Affairs and Security Policy presented a new EU Cybersecurity Strategy at the end of 2020, which covers the security of essential services such as hospitals, energy grids and railways. It also covers the security of the ever-increasing number of connected objects in our homes, offices and factories. The Horizon Europe Programme and the Digital Europe Programme provide strategic funding to answer such challenges.

Presentation of the European Cybersecurity Competence Centre and Network and of the National Coordination Centre of the Czech Republic

Monday, September 12, 2022, 16:00–16:30

- Pascal Steichen, Chairman of the European Cybersecurity Competence Centre (ECCC)
- Jan Bečka, NÚKIB (The National Cyber and Information Security Agency of the Czech Republic)

The need to respond to new cybersecurity challenges, to build resilience and improve technological and industrial skills of EU member states, and to address the fragmentation of their industrial and research initiatives, has led to the creation of the European Cybersecurity Competence Centre (ECCC), which aims to increase Europe's cybersecurity capacities and competitiveness in cooperation with a Network of National Coordination Centres. The talk will focus on the process of establishing the ECCC and its main tasks, the fulfilment of which will enhance European technological sovereignty through joint investments in strategic research projects in cybersecurity.
The presentation will also focus on the present state of the National Coordination Centre (NCC) in the Czech Republic, which is one of the priorities of the current National Plan for Research and Development in Cyber and Information Security. Furthermore, the main tasks of the NCC will be discussed, as well as its benefits to the Czech expert community in the field of research and development in cyber security at both the national and international level.

Talks

Keynote speech: Current Challenges in the Field of Cybersecurity – State of the Discipline, Challenges

Monday, September 12, 2022, 16:30–17:30

- Prof. Bart Preneel, KU Leuven

Research and business investments in cybersecurity are booming yet the state of cybersecurity seems to be getting worse over time. This paradox can be explained by a combination of technology, market and policy failures. Certification can resolve this problem, but getting it right is very challenging. At the same time, cybersecurity is seeing a shift from attack prevention to detection based on sophisticated big data and AI solutions. This approach is promising but it results in collateral damage to privacy and may well bring new cybersecurity risks. This talk will discuss how these challenges can be addressed by a innovative research solutions embedded in a strategic policy.

Panel: Professional qualification in the Field of Cybernetic Security

Tuesday, September 13, 2022, 9:00–10:00

- Pavel Loutocky (C, MUNI – Czechia)
- Miroslav Mareš (C, MUNI – Czechia)
- Jakub Čegan (Cybersecurity Hub – Czechia) Petr Seifert (National Cyber and Information Security Agency)
- Pre-recorded introduction from Fabio di Franco (ENISA – EU)

The panel focuses on Czech and EU initiatives aimed at raising skills and building capacity in the field of cybersecurity. The low availability of qualified professionals in this field is a global problem that needs to be addressed systematically through needs analysis and subsequent implementation of appropriate measures. This issue will be discussed by a panel of experts representing public administration, academia and industry. In particular, current initiatives and projects, available needs and resource analyses, and mechanisms through which the availability and skills of the cybersecurity workforce could be effectively increased will be discussed.

Talks

Roundtable: Foresight for (cyber)secure future

Tuesday, September 13, 2022, 9:00–10:30

- Moderator: Michal Pazour (Technology Centre CAS, Czech Republic)
- Quentin Ladetto (armasuisse, Switzerland)
- Luděk Moravec (Czech Embassy in Washington DC, USA)
- Kristýna Meislová (Technology Centre CAS, Czech Republic)

Today's world is characterised by considerable volatility, uncertainty, complexity and ambiguity. This is reflected in a wide range of areas, including defence and security. Timely and relevant information on dynamic technological and related societal changes is important for strategic decision-making by governments, businesses, academic institutions and individuals. Very rapid and dynamic technological and societal changes and their potential impacts need to be anticipated and responded to in a timely and flexible manner. Therefore, it is essential to continuously monitor technological and societal trends and to identify in advance the resulting opportunities and potential threats to the security system and to society in general. The aim of this session is to discuss approaches to systematically identify technological trends relevant to the security domain.

Panel: Post-quantum Security and Formation of International Quantum Network

Tuesday, September 13, 2022, 10:30–11:30

- Foreword: Assoc. Prof. Lukáš Malina (FEEC BUT, Czech Republic)
- Presentation of research activities: Tomáš Horváth (FEEC BUT, Czech Republic)
- Moderated by: Assoc. Prof. Petr Münster (FEEC BUT, Czech Republic)
- Producers representatives: Florian Fröwis (ID Quantique) and Robert Woodward (Toshiba)
- Research corporations representatives: Hübel Hannes (OpenQKD, Austria)
- University representatives: Prof. Miloslav Dušek (UPOL, Czech Republic)

This panel focuses on presentation of activities in EU and the Czech Republic in the field of quantum and post-quantum technologies, followed by a discussion of the issue. Representatives of both academic and private sector from Czech Republic as well as from abroad will participate in the panel discussion. Issues that will be discussed in the panel: the current state of national quantum network formation, technical equipment accessibility, the state of European quantum infrastructure (EuroQCI), the standardizing process of quantum and post-quantum systems, possibilities of European fund financing.

Talks

Roundtable: Ways of putting technologies and research results into practice

Tuesday, September 13, 2022, 11:00–12:30

- Moderator: Martin Faťun (Technological Center of the Czech Academy of Sciences)
- Silvia Jirásková (Technology Centre CAS)
- Tomáš Kubala (Industry Cluster 4.0)
- Tereza Šamanová (CzechInno)
- David Wright (Trilateral Research, UK
- Miloš Dvořák (National Cyber and Information Security Agency)

Panel focused on the (eco)system for cooperation between the research sphere and enterprises and public institutions in the field of cyber security and for effective transfer of research results into practice. What structures and tools are available for collaboration between research and practice, where reserves do we have and how should we improve the existing mechanisms and their use? Experiences of researchers and potential users, barriers, good practices and recommendations for further development will be presented and discussed.

Panel: Education and prevention in cybersecurity

Tuesday, September 13, 2022, 11:30–12:30

- Foreword: Assoc. Prof. Petr Číka (FEEC BUT, Czech Republic)
- Presentation of research activities: Assoc. Prof. Jan Hajný (FEEC BUT, Czech Republic)
- Petr Seifert (National Cyber and Information Security Agency – NÚKIB, Czech Republic)
- Tomáš Pitner (Masaryk University, Czech Republic)
- Maria Leitner (University of Vienna, Austria)
- Paresh Rathod (Laurea University of Applied Sciences, Finland)
- Edmundas Piesarskas (Lithuanian Cybercrime Center of Excellence for Training)

This panel focuses on the issues of education in the field of cybernetic security in the Czech Republic and EU. A presentation of activities concerning this matter in the Czech Republic and EU, followed by an international roundtable discussion with representatives of universities, security forces and EU organizations are part of the roundtable. Issues that will be discussed in the panel (i.a.): educational framwork (e.g. EU CSF), new training technolgies (e.g. cyber-range), the role of national authorities in education, cooperation in forming new study programmes.

Talks

Cyber criminality and Digital Forensics

Tuesday, September 13, 2022, 14:00–15:00

- Foreword: Assoc. Prof. Ryšavý (FIT BUT, Czech Republic)
- Presentation of research activities: Assoc. Prof. Petr Matoušek (FIT BUT, Czech Republic)
- Rastislav Janota (National Cyber Security Center SK-CERT, Slovakia)
- Mark Scanlon (Associate Professor, University College Dublin, Ireland)
- Stanislav Kovárník (Krajské ředitelství policie Jihomoravského kraje, Czech Republic)
- Vladimír Veselý (netsearch, Czech Republic)

Cyber criminality is an imminent threat to modern digitalized society. Many individuals and companies experienced cyber-attacks where the damages were from hundreds of euros to millions. As our society depends on digital infrastructure, we must carefully protect our critical assets and fight cybercriminals. A high level of cybersecurity is crucial for the trust of Europe's society and citizens in the digital environment, which is the major driving force of growth and competitiveness.

Tools to Support Security Research - Overview of National Programs of Security Research

Tuesday, September 13, 2022, 14:00–15:00

- Ministry of the Interior of the Czech Republic

The Ministry of the Interior is the gestor of security research and a provider of state support in research, development and innovation. This support is provided primarily through security research programs. The main goal of security research programs is to support development, testing and evaluation activities in the area of the security of the state and its citizens, in accordance with the characteristic needs of the security system.
The Ministry of the Interior therefore implements a program portfolio consisting of four basic programs. Each security research program focuses on different types of research projects, defines the preferred types of main results and their ownership, as well as the involvement of user organizations in the projects in the roles of application guarantors and testing authorities. Due to the specific focus of security research programs, projects are selected using adequate selection and evaluation criteria, which emphasize different attributes of both projects and solution characteristics.

Talks

Speech Mining

Tuesday, September 13, 2022, 15:30–16:30

- Foreword: Prof. Jan Černocký (FIT BUT, Czech Republic)
- Radim Kudla (Government solutions, Phonexia, Czechia)
- Christoph Prinz (CTO, Hensoldt Analytics GmbH, Austria)
- Claudia Cevenini (Consultant on legal informatics, IT ethics, and data protection, adjunct professor of IT law, DISI University of Bologna, Italy)

Speech has been the main modality of human to human communication since the beginning of mankind and besides its legitimate use, it is also the main communication vehicle of the "bad guys". US DARPA projects were at the very start of automatic speech recognition research and development and security and defense organizations continue to be the main sponsor of speech research and development. While with current widespread use of voice assistants and services, it might seem that "speech" is solved, speech mining for security (tactical, investigation and forensic use) still presents challenges: multilinguality, robustness, operation with far-field microphones and many others. This panel includes specialists from academia, industry and legal field and will discuss the future of speech R&D in security research and deployment.

TALKS

Cybersecurity Research Support in Horizon Europe programme

Tuesday, September 13, 2022, 15:30–16:30

- LENKA ŠVEJCAROVÁ, TECHNOLOGY CENTRE CAS, CZECH REPUBLIC
- LYUDMYLA TYSYACHNA, TECHNOLOGY CENTRE CAS, CZECH REPUBLIC
- DAVID WRIGHT, TRILATERAL RESEARCH, UNITED KINGDOM

Horizon Europe is the EU's 9th Framework Programme for funding research and innovation, with the most ambitious scope and largest budget in history. Security research funding opportunities are placed in the sub-programme Cluster 3 "Civil Security in Society", which is implemented through collaborative projects carried out by consortia of partners. The presentation of Lenka Švejcarová, who is the national contact for Cluster 3, will inform about the currently open calls focused on cybersecurity.

In addition to grants designated merely for international project consortia, Horizon Europe offers also funding for individual excellent researchers. The European Research Council (ERC), an autonomous part of the EU's Framework Programmes governed and evaluated solely by scientists, supports ground-breaking ideas throughout research domains with no prescribed priority topics. Lyudmyla Tysyachna, the national contact for ERC, will address these opportunities and present the support system that Czech applicants can benefit from.

As a comprehensive follow up of the previous presentations David Wright from Trilateral Research (UK), which has successfully partnered in and coordinated dozens of Horizon projects, will share his experience with the preparation and writing of project proposals, with the partner search, and will also focus on the collaboration with end-users from public and private sectors.

Talks

Safe Artificial Intelligence

Tuesday, September 13, 2022, 16:30–17:30

- Opening talk: Jiří Zlatuška (MUNI – Czechia)
- Radim Polčák (Faculty of Informatics, Masaryk University – Czechia)
- Antonín Kučera (Faculty of Informatics, Masaryk University – Czechia)
- Tomáš Vojnar (Faculty of Information Technology, Brno University of Technology – Czechia)
- Alžběta Krausová (Institute of State and Law, Czech Academy of Sciences – Czechia)
- Petr Koubský (DeníkN – Czechia)

Artificial intelligence is one of the disruptive technologies that are and will continue to impact all spheres of digital society. On the one hand, its implementations provide new tools to ensure security, but at the same time, it also brings certain technical, social, ethical or legal security risks that need to be actively evaluated and addressed. This panel will discuss the current situation in the field of AI security, the main security challenges related to the use of this technology and the approaches to addressing them that current research offers. Research institutions, public administration and industry are represented on the panel.

Image Processing and Security

Tuesday, September 13, 2022, 18:00–19:00

- Foreword: Prof. Adam Herout (FIT BUT, Czech Republic)
- Heikki Kalviainen (LUT University, Finland)
- Aleksej Makarov (Vlatacom Institute of Technology, Serbia)
- Moti Zwilling (Ariel University, Israel)
- Pavel Zemčík (FIT VUT, Czech Republic)

Image and video processing presents a significant source of Information in security. The image and video contain not only security-relevant Information (such as the presence and identity of persons, vehicles, and other objects) but also more advanced Information (such as their speed and trajectory; in the case of multi-camera systems, also Information about motion in more extended periods). Image and video can also be used for biometry and to extract safety-related Information. On the other hand, image and video processing are also subjects of cybersecurity, as well as other matters such as the data authenticity, timing of its acquisition, or data protection. Finally, images and video can present a threat to privacy and issues, such as to what extent the society is ready to process iamge and video on a wide scale and how the technology can be made safe from the privacy point of view are subject of interest as well.