18th European Conference on Cyber Warfare and Security
ECCWS 2019
University of Coimbra - Polo II, Portugal
4 - 5 July 2019

Wednesday 3 July 2019

| 18:30 | Welcome drinks and pre-conference registration (Until 19:30):
Ibis Coimbra Centro Hotel, n°70 Edificio Topazio, Avenida Emídio Navarro, 3000-150 Coimbra |

Thursday 4th July 2019

08:45	Registration and coffee, 4th Floor
09:15	**Room: Amphitheater B1, 4th Floor** **Welcome and Opening of the Conference**
09:30	Keynote Address: Dr. Leandros A. Maglaras, De Montfort University, UK *Protection of Critical National Infrastructures*
10:15	Conference splits into streams on the 5th Floor

	Room: B2 **Stream A - Hacking** **Chair - David Ormrod**	**Room: C5.1** **Stream B - Mini Track on Cross-Discipline Research** **Chair - Char Sample**	**Room: C5.4** **Stream C - Threats** **Chair - Joe Adams**	**Room: A5.1** **Stream D - Managing Cybersecurity** **Chair - Julie Murphy**	**Room: A5.4** **Stream E - Innovations** **Chair - Peter Baumann**
10:30	A Performance Study of the Ethical Hacking Capabilities of Single Board Computers **Arias de la Vega** Adolfo Jose and Christina **Thorpe**, Technological University Dublin, Ireland	The Cyber Counterintelligence Matrix for Outsmarting your Adversaries **Duvenage** Petrus, Victor **Jaquire** and Sebastian **von Solms**, University of Johannesburg, South Africa	Cyber Attribution 2.0: Capture the False Flag **Pahi** Timea and Florian **Skopik**, AIT Austrian Institute of Technology, Vienna, Austria	An Analysis of Security Features on Web Browsers **Sengupta** Siddhartha and Joon **Park** , Syracuse University, NY, USA	In search of a social contract for cybersecurity **Liaropoulos** Andrew, University of Piraeus, Greece
11:00	Hackers and the Military : How to Recruit and Manage "Hidden Talent"? **Danet** Didier , Saint-Cyr Military Academy, Guer, France	Research Challenges for Cybersecurity and Cyberwarfare: a South Africa Perspective **Ramluckan** Trishana, Brett **van Niekerk**, University of KwaZulu-Natal, Westville and Louise **Leenen**, University of Western Cape, Cape Town, South Africa	Cyber Security Risk Modelling and Assessment: A Quantitative Approach **Sokri** Abderrahmane, DRDC CORA, Department of National Defence, Government of Canada, Ottawa, Canada	A framework for managing cybersecurity effectiveness in the digital context **Carcary** Marian, Eileen **Doherty** and Gerry **Conway,** Innovation Value Institute, Maynooth University, Maynooth, Ireland	Creating modern blue pills and red pills **Algawi** Asaf, Roee **Leon**, University of Jyväskylä, Finland and Amit **Resh**, Shenkar College, Nezer **Zaidenberg,** College of Management Academic Studies, Michael **Kiperberg**, Holon Institue of Technology, Israel
11:30	Taxonomies of Cybercrime: An Overview and Proposal to be used in Mapping Cyber Crimninal Journies **Somer** Tiia, Tallinn University of Technology, Tallinn, Estonia	Online Expression and Spending on Personal Cybersecurity **Rauhala** Juhani, Pasi **Tyrväinen**, University of Jyväskylä, Finland and Nezer **Zaidenberg**, College of Management Academic Studies, Israel	Alert Correlation using Diamond Model for Cyber Threat Intelligence **Shin** Young Sup, Chang Wan **Lim**, Sung Young **Cho**, Insung **Han**, Haengrok **Oh**, Agency for Defense Development, Seoul, Moo Kyu **Park** and Kyung Ho **Lee**, Korea University, South Korea	Information Warfare: Fabrication, Distortion and Disinformation: a Case Study and Anticipatory Ethical Analysis **Wilson** Richard, Towson University/University of Baltimore, USA	Characteristics of a High Performance Cybersecurity Culture **Chatterjee** Dave, The University of Georgia, Athens, GA, USA (Presentation only)
12:00	Lunch	Lunch	Lunch	Lunch	Lunch

	Room: B2 Stream A - Mini Track on Security for Smart Cities and IACS-based Critical Infrastructures Chair - Filipe Caldeira	Room: C5.1 Stream B - Mini Track on Cross-Discipline Research Chair - Char Sample	Room: C5.4 Stream C - Internet of Things Chair - Joon Park	Room: A5.1 Stream D - National Defence Chair - Gerhard Henselmann	Room: A5.4 Stream E - PhD colloquium Chair - Tiago Cruz Paulo Simões	Room: B1 Stream E - Cyber Defense Chair - Dave Chatterjee
13:00	Personal Data Protection a Contextual Framework for Organisational Managment of Personal Data in the Digital Context **Carcary** Marian, Eileen **Doherty** and Gerry **Conway**, Innovation Value Institute, Maynooth University, Ireland	Opperator Impressions of 3D Visualizations for Cybersecurity Analysts **Kullman** Kaur, TalTech University, Tallin, Estonia Noam Ben **Asher** ORAU, Oakridge, and Char **Sample**, ICF Inc, Columbia, USA	PhySec in Cellular Networks: Enhancing Security in the IIoT **Lipps** Christoph, Mathias **Strufe**, Sachinkumar Bavikatti **Mallikarjun** and Hans Dieter **Schotten**, German Research Center for Artificial Intelligence, Germany	Protection of critical infrastructure in national cyber security strategies **Izycki** Eduardo, Universidade de Brasília (UnB) and Rodrigo **Colli**, Institutional Security Cabinet, Brasil	13:00-13:10 The Peculiarities of Securitising Cyberspace: A Multi-actor Analysis of the Construction of Cyber Threats in the US **Fouad** Noran, University of Sussex, Brighton, UK 1315-1325 Protecting the Besieged Cyber Fortress: Russia's Response to Cyber Threats **Kari** Martti, University of Jyväskylä, Finland 1330-1340 The Transformation of Islamic Terrorism Through Cyberspace: the case of ISIS **Kapsokoli** Eleni, University Of Piraeus, Greece 1345-1355 E-health Systems in Digital Environments **Hummelholm** Aarne, University of Jyväskylä, Finland 1400-1410 Effects of Cyber Domain in Crisis Management **Simola** Jussi and Martti **Lehto**, University of Jyväskylä, Finland 1415-1425 Government Efforts Toward Promoting IoT Security Awareness for End Users: a Study of Existing Initiatives **Kautsarina** and Bayu **Anggorojati**, Universitas Indonesia, Indonesia 1430-1440 The Current State of Research in Offensive Cyberspace Operations **Huskaj** Gazmend, Swedish Defence University, Stockholm, Sweden 1445-1455 Undersea Optical Cable Network and Cyber Threats **Hummelholm** Aarne, University of Jyväskylä, Finland 1500-1515 - Feedback and Discussion	On Neutrality and Cyber Defence **Stolz** Marcel, University of Oxford, UK
13:30	Operational Risk Assessment on Internet of Things: Mitigating Inherent Vulnerabilitites **Park** Youngjun, Mark **Reith** and Barry **Mullins**, Air Force Institute of Technology, Wright Patterson AFB, OH, USA	Revisiting Cyber Definition **Azmi** Riza, University of Wollongong, Australia and **Kautsarina**, Universitas Indonesia, Depok, Indonesia	A novel IDS architecture for Internet of Things networks **Santos** Leonel, Carlos **Rabadão**, Polytechnic Institute of Leiria and Ramiro **Gonçalves**, University of Trás-os-Montes e Alto Douro, Portugal	Towards a Framework for the Selection and Prioritisation of National Cybersecurity Functions **Jacobs** Pierre , Sebastiaan **Von Solms**, University of Johannesburg, Brett **Van Niekerk**, University of Kwazulu Natal & Marthie **Grobler**, CSIRO, Australia		Crossed Swords: a Cyber Red Team Oriented Technical Exercise **Blumbergs** Bernhards, CERT.LV, Riga, Latvia, Rain **Ottis** and Risto **Vaarandi**, Taltech, Tallinn, Estonia
14:00	Smart Citizens Wanted! How to Act Responsibly with Data Security and Privacy? **Ziske** Christine, Kikusema AB, Mariestad, Sweden and Ulf **Ziske**, KikuSema GmbH,	A Biological Framework for Characterizing Mimicry in Cyber-Deception **Templeton** Steven, Matt **Bishop**, Karl **Levitt**, University of California, Davis and Mark **Heckman**, University of San Diego, USA	Secure Application for Health Monitoring **Bhuse** Vijay, Grand Valley State University, Allendale and Harsh **Sinha**, Western Michigan University, Kalamazoo, MI, USA	Cybersecurity in the Public sector in Greece **Drivas** George, Leandros **Maglaras**, National Cyber Security Authority of Greece, Athens, Greece and Helge **Janicke**, De Montfort University, UK		Weaponized Narratives, Soft Power and Ideological Filtering **Wilson** Richard, Towson University, Maryland, USA (Presentation Only)
14:30	ARM Security Alternatives **Yehuda** Raz Ben and Roee **Leon**, University of Jyvaskyla, Finland and Nezer **Zaidenberg**, College of Management Academic Studies, Isreal	Thoughts about a General Theory of Influence in a DIME/PMESII/ASCOP/IRC2 Model **Kodalle** Thorsten, Command and Staff College German Armed Forces, Davide **Ormrod**, University of New South Wales, Kingston, Australia, Keith **Scott**, De Montfort University, UK and Char **Sample**, ICF USA Army Research Laboratory, USA	IoT Architectures for Critical Infrastructures Protection **Zamfiroiu** Alin, Catalin **Boja** Tiberiu **Georgescu**, Cosmin **Cartas** and Bogdan **Iancu**, The Bucharest University of Economic Studies, Bucharest, Romania	Building a (French) National Priority: the Grammar of the French Cyber Defence Strategy **Haddad** Saïd, Saint Cyr Military Academy Research Center, Guer, France		The Offensive Cyber Operations Playbook **Granåsen** Dennis and Margarita **Jaitner**, Swedish Defence Research Agency, Sweden
15:00	*Refreshments* 15:10-15:25 - Presentation by Rasdaman GmbH - Big Datacubes: the New Paradigm for Agile Space/Time Decision Making					
	Room: B2 Stream A - Mini Track on Big Data for Cybersecurity Chair - Nasser Abouzakhar	Room: C5.1 Stream B - Mini Track on Cross-Discipline Research Chair - Char Sample	Room: C5.4 Stream C - Strategy Chair - Helge Janicke	Room: A5.1 Stream D - Information Security Chair - Simon Duque Anton	Room: A5.4 Stream E - Masters Colloquium Chair - Filipe Caldeira and Paulo Simões	
15:30	How to Apply Privacy by Design in OSINT and Big Data Analytics? **Rajamäki** Jyri, Laurea University of Applied Sciences, Espoo and Jussi **Simola**, University of Jyväskylä, Finland	A Cross-Discipline Approach to Countering 4th Generation Espionage **Sample** Char, Keith **Scott**, Emily **Darraj**, University of Georgia, USA	The Possibilities of Cyber Methods as Part of Maritime Warfare:Case Baltic Sea **Turunen** Maija, Finland`s National Defence University, Helsinki, Finland	Success Factors and Pitfalls in Security Certifications **Salminen** Helvi, Gemalto Oy, Vantaa, Finland (Non-academic)	1530-1540 Synthetic Data Generation with Machine Learning for Network Intrusion Detection Systems **Newlin** Marvin, Mark **Reith** and Mark **DeYoung**, Air Force Institute of Technology, Dayton, Ohio, USA 1545-1555 Fake News Detection Using Ensemble Machine Learning **Mohale** Potsane and Wai Sze Leung, University of Johannesburg, South Africa 1600-1610 Description Logics and Axiom Formation for a Digital Forensics Ontology **Ellison** Dagney, Hein **Venter** and Adeyemi **Ikuesan**, University of Pretoria, South Africa 1615-1625 Detecting Advanced Persistent Threat Malware Using Machine Learning-based Threat Hunting **Lin** Tien-Chih, Cheng-Chung **Kuo**, and Chu-Sing **Yang**, National Cheng Kung University, Tainan, Taiwan 1630 -1700 - Feedback and Discussion	
16:00	Technical Guidelines for Evaluating and Selecting Data Sources for Cybersecurity Threat Intelligence **Mtsweni** Jabu, CSIR and Muyowa **Mutemwa**, UNISA, Pretoria, South Africa	A Methodology for the Comparative Analysis of Strategic Culture and Cyber Warfare **Williams** Andrew, University of New South Wales, Canberra, Australia	The Need for More Sophisticated Cyber-Physical Systems War Gaming Exercises **Rege** Aunshul, Temple University, Philadelphia and Joe **Adams**, Merit Network, An Abor, USA	The Balanced Digitalisation and Digital Security: Case of Regional Authorities **Kuusisto** Tuija, University of Jyväskylä Finland and Rauno **Kuusisto**, The Finnish Defence Research Agency, Finland		
16:30	Protecting Big Data and Small Pixels in the Web Age **Baumann** Peter, Jacobs University, Bremen, Germany (Presentation only)	The Persuasion Game: Developing a Serious Game Based Model for Information Warfare and Influence Studies **Ormrod** David, Benjimin **Turnbull**, University of New South Wales, Australia, Keith **Scott**, De Montfort University, UK, Char **Sample**, ICF, USA and Thorsten **Kodalle**, College of the German Armed Forces,	Using Hypervisors to Overcome Structured Exception Handler Attacks **Algawi** Asaf, Roee **Leon**, University of Jyväskylä, Finland and Amit **Resh**, Shenkar College, Nezer Zaidenberg, College of Management Academic Studies, Michael **Kiperberg**, Holon Institue of Technology, Israel	A Capability Approach to Managing Information Security **Carcary** Marian, Eileen **Doherty** and Gerry **Conway**, Innovation Value Institute, Maynooth University, Ireland		
17:00	Information Technology Governance: The Role of Board of Directors in Cybersecurity Oversight **Musleh Al-Sartawi** Abdalmuttaleb, Ahlia University, Manama, Bahrain	An Analysis of Selected Cyber Intelligence Texts **van Niekerk** Brett, Trishana **Ramluckan**, University of KwaZulu-Natal, Westville and Petrus **Duvenage**, University of Johannesburg, South Africa	Cyber Resilience Strategy and Attribution Under the Context of International law **Moslemzadeh Tehrani** Pardis, University of Malaya, Kuala Lumpur, Malaysia	A Data Security Framework for Cloud Computing Adoption: Mozambican Government Cloud Computing **Vumo** Ambrosio Patricio, Stefan **Kopsell** TU-Dresden, Germany, Josef **Spillner**, Zurich University of Applied Sciences, Switzerland		
17:30	**Close of Conference Day**	**Close of Conference Day**	**Close of Conference Day**	**Close of Conference Day**	**Close of Conference Day**	**Close of Conference Day**
19:30	**Conference Dinner - Solar do Bacalhau Restaurant, Rua da Sota, nº 10, 3000-059 Coimbra**					

	Friday 5th July 2019				
09:00	**Room: Amphitheater B1, 4th Floor** **Opening Messages**				
09:05	**Keynote Address: Nuno Medeiros, EDP Distribuição, Lisbon, Portugal** *Cyber Security Challenges for a Critical Infrastructure Operator*				
09:50	**Introduction to ECCWS 2020**				
10:00	*Refreshments - 4th Floor* *Poster contributors stand by their posters for others to discuss the research*				
	Room: B2 **Stream A - Cyber Warfare** **Chair - Saïd Haddad**	**Room: C5.1** **Stream B - Mini Track on Cross-Discipline Research** **Chair - Char Sample**	**Room: C5.4** **Stream C - Legal Implications** **Chair - Didier Danet**	**Room: A5.1** **Stream D - Education and Awareness** **Chair - Grace Leung**	**Room: A5.4** **Stream E - Masters and PhD Colloquium** **Chair - Paulo Simões and Tiago Cruz**
10:45	Leveraging the OODA Loop with Digital Analytics to Counter Disinformation **Carroll** Jami, Unaffiliated, Newport, RI, USA	Integrative Approach to Understand Vulnerabilities and Enhance the Security of Cyber-Bio-Cognitive-Physical Systems **Tagarev** Todor, Institute of ICT, Nikolai **Stoianov**, Bulgarian Defence Institute and George **Sharkov**, ESI Centre Eastern Europe, Sofia Bulgaria	Legal Understanding of State-linked Cyberattacks and Cyber Malicious Activities **Watney** Murdoch, University of Johannesburg, South Africa	Improving Phishing Awareness in the United States Department of Defense **Dukarm** Christopher, Richard **Dill** and Mark **Reith**, Air Force Institute of Technology, Dayton, USA	1045-1055 Self-Directed Learning Tools in USAF Multi-Domain Operations Education **Flack** Nathaniel and Mark **Reith**, US Air Force Institute of Technology, Ohio, USA 1100-1110 Human Factors of Cyber Operations: Decision Making Behind Advanced Persistence Threat operations
11:15	Online Glossary of Cyber security **Burita** Ladislav, University of Defence, Brno, Czech Republic	Strategic Foresight and Resilience through Cyber-Wargaming **Ormrod** David, University of New South Wales, Kingston, Australia and Keith **Scott**, De Montford University, UK	Cyber-Influence Operations: A Legal Perspective **Ramluckan** Trishana and Brett **van Niekerk** University of KwaZulu-Natal, Westville, South Africa and Alicia **Wanless**, Kings College London, UK	Instilling Digital Citizenship Skills through Education: A Malaysian Perspective **Susanty** Ramona, Zahri **Yunos**, Mustaffa **Ahmad** and Norrizan **Razali**, CyberSecurity Malaysia, Selangor, Malaysia (Non-academic)	**Siukonen** Veikko, Finnish Defence Research Agency, Riihimaki, Finland 1115-1125 Cyber Entanglement: A Framework for the Study of US-China Relations **Pontbriand** Karine, University of New South Wales, Canberra, Australia
11:45	Operational Tempo in Cyber Operations **Lemay** Antoine, Cyber Defense Corporation, Montreal and Sylvain **Leblanc**, Royal Military College of Canada, Canada	Optimal Sensor Placement in a Network Topology from the Defence Point of View **Kuikka** Vesa and Juha-Pekka **Nikkarila,** Finnish Defence Research Agency, Riihimäki, Finland	Legal Perspectives to the Cyber Security Dilemma **van Niekerk** Brett and Trishana **Ramluckan**, University of KwaZulu-Natal, Westville, South Africa	Information Security is more than just Policy; It is in your Personality **Simola** Petteri, Toni **Virtanen** and Miika **Sartonen**, Finnish Defence Research Agency, Tuusula, Finland	1130-1140 A Technical Overview on the Usage of Cloud Encryption Services **Carvalho** Daniel , João **Morais**, João **Almeida**, Pedro **Martins**, Carlos **Quental** and Filipe **Caldeira** , Polytechnic Institute of Viseu, Portugal (Masters)
12:15	Where Cyber meets the Electro Magnetic Spectrum **Henselmann** Gerhard and Martti **Lehto**, University of Jyväskylä, Finland	Artificial Intelligence Cybersecurity Framework: Preparing for the here and now with AI **Darraj** Emily, Capitol Technology University, Suwanee, Connie **Justice**, Purdue School of Engineering and Technology and Charmane **Sample**, ICF, USA	Digital Demateralisation in the Portuguese Tax System **Silva** Ana Paula, Polytechnic Institute of Viana do Castelo and REMIT, Portucalense University, Porto, Portugal and Susana **Aldeia,** Universidade Portucalense, Porto, Portugal	Grasping Cybersecurity: A Set of Essential Mental Models **van den Berg** Jan, Delft University of Technology, The Netherlands	11:45-11:55 A Conceptual Model for the Development of Cybersecurity Capacity in Mozambique **De Barros** Martina Jennifer and Horst **Lazarek,** Technical University of Dresden, Germany 1200-12:30 - Feedback and discussion
12:45	Lunch	Lunch	Lunch	Lunch	Lunch

	Room: B2 Stream A - Social Media Chair - Ladislav Burita	Room: C5.1 Stream B - Mobile Systems Chair - Aarne Hummelholm	Room: C5.4 Stream C - Intelligence and Anticipation Chair - Sylvain Leblanc	Room: A5.1 Stream D - Detection Chair - Jan van den Berg	Room: A5.4 Stream E - Polictical Issues Chair - Lee Speakman
13:45	Agile Technology Development to Improve Scenario-Based Learning Exercises **Turnbull** Benjamin, David **Ormrod**, Nour **Moustafa** and Nicholas **Micallef**, University of New South Wales, Canberra, Australia	An Information Security Management Scaffold for Mobile Money Systems in Uganda **Kanobe** Fredrick, MP **Alexander**, Tshwane University of Technology, Pretoria and KJ **Bwalya**, University of Johannesburg, South Africa	Cyber Warfare, Terrorist Narratives and Counter Terrorist Narratives: Anticipating The Ethical Issues **Wilson** Richard, Towson University, Maryland, USA	Putting Together the Pieces: A Concept for Holistic Industrial Intrusion Detection **Duque Anton** Simon and Hans Dieter **Schotten**, German Research Center for Artificial Intelligence, Kaiserslautern, Germany	Western World Order in the Crosshairs? A Theoretical Review and Application of the Russian 'Information Weapon' **Ristolainen** Mari and Juha **Kukkola**, Finnish National Defence University, Riihimaki, Finland
14:15	Does Time Spent on Device Security and Privacy Inhibit Online Expression? **Rauhala** Juhani, Pasi **Tyrväinen**, University of Jyväskylä, Finland and Nezer **Zaidenberg**, College of Management Academic Studies, Israel	Detection of Premeditated Security Vulnerabilities in Mobile Applications **Brilingaite** Agne, Linas **Bukauskas**, and Eduardas **Kutka**, Vilnius University, Lithuania	Cyberpsychological Threat Intelligence **Murphy** Julie and Anthoney **Keane,** Technological University Dublin, Ireland	Cyber security of Vehicle CAN bus **Pöyhönen** Jouni, Pyry **Kotilainen**, Janne **Kalmari,** Janne **Poikolainen** and Pekka **Neittaanmaki** University of Jyväskylä, Finland	Cyber Sanctions: The Embargo of Flagged Data in a Geo-Cultural Internet **Iftimie** Ion A., Central European University, Vienna, Austria and Michele C.A. **Iftimie**, USA
14:45	Facebook, Cambridge Analytica, Facebook and Influence Operations Case Study and Anticipatory Ethical Analysis **Wilson** Richard, Towson University/ University of Baltimore, Towson Maryland, USA	A Comparison of the Most Popular Messaging Applications in terms of Security and Privacy Features **Botha** Johnny, Carien **van 't Wout**, CSIR and Louise **Leenan**, University of the Western Cape, South Africa	Investigation and Surveillance on the Darknet:An Architecture to Reconcile Legal Aspects with Technology **Filiol** Eric and Maxence **Delong**, ESIEA - CVO Lab, Laval, France	A Framework for Improved Home Network Security **Craveiro** António, Jorge **Proença**, Tiago **Cruz** and Paulo **Simões** University of Coimbra, Portugal	The far right of the UK and Ukraine's Views about European integration: an Analysis of Online Political Discourse **Bolgov** Radomir and Olga **Filatova**, Saint Petersburg State University, Russia
15:20	**Room: B1** **Summary of the Conference** **Award to the winner of the Best PhD Paper and Best Poster**				
15:30	**Close of Conference**				

Posters will be displayed from Thursday afternoon until lunchtime on Friday
Poster Presenters will stand by their posters at 10:00 on Friday to present their work to other participants

	Poster with a WIP Paper	Poster Only	Invited Posters		
	US-Russian Relations in Cybersecurity: the Constructivist Dimension **Stadnik** Ilona, Saint-Petersburg State University, Russia	Cambridge Analytica, Soft Power and Influence Operations **Wilson** Richard, Towson University, Maryland, USA	A Digital Red Cross? Potential of NGOs and Neutral Countries in Cyberspace Marcel **Stolz**, University of Oxford, UK	Tracing the Path: Attack Origin Detection in Industrial Environments Anton **Duque**, Simon **Hans** and Dieter **Schotten**. German Research Center for Artificial Intelligence, Kaiserslautern, Germany	Scoping the Scenario Space for Multi-sector Cybersecurity Analysis Todor **Tagarev**, Institute of ICT, Sofia, Bulgaria and Nikolai **Stoianov**, Bulgarian Defence Institute, Sofia, Bulgaria
	Towards Automated Threat-based Risk Assessment for Cyber Security in Smarthomes **Pandey** Pankaj, Sokratis **Katsikas** and Marios **Anagnostopoulos**, Norwegian University of Science & Technology, Norway, Anastasija **Collen,** Niels **Nijdam** and Dimitri **Konstantas,** University of Geneva, Switzerland	Facebook, Russia and Influence Operations: An Anticipatory Ethical Analysis and Case Study **Wilson** Richard, Towson University, Maryland, USA	An Overview of the Accounting and tax Framework of Hardware and Software as Forensic Tools. The case study of Portuguese Private Institutions Susana Cristina **Aldeia,** Universidade Portucalense, Porto, Portugal and Ana Paula **Silva**, Polytechnic Institute of Viana do Castelo and REMIT, Portucalense University, Porto, Portugal	Optimizing Security Helvi **Salminen**, Gemalto Oy, Vantaa, Finland	Industrial Wireless Network Security: A Light-Weight Key Distribution Scheme for CPPS and IIoT Christoph **Lipps** and Hans Dieter **Schotten**, German Research Center for Artificial Intelligence, Kaiserslautern, Germany
	Mitigating Return Oriented Programming **Speakman** Lee, Thaddeus **Eze** and Samuel **Wairimu**, University of Chester, UK and David **Baker**, Pennaf Housing Group, UK		Attitudes Towards Medical Equipment Cloud Services in Healthcare Jyri **Rajamäki** and Jukka **Laaksonen**, Laurea University of Applied Sciences, Espoo, Finland		
	Applicability of Resilience Metrics in the Context of Telecommunications Services **Rusi** Tarja, University of Jyväskylä, Finland				