



ARES Conference
International Conference on Availability, Reliability and Security

ARES 2019

14th International Conference on Availability,
Reliability and Security

August 26 – August 29, 2019
Canterbury, UK



Organized by....





Welcome to ARES 2019

Welcome Message from ARES Program Committee Co-Chairs and General Chair

It is our great pleasure to welcome you to the Fourteenth International Conference on Availability, Reliability and Security (ARES 2019).

The Fourteenth International Conference on Availability, Reliability and Security (ARES 2019) brings again together researchers and practitioners in the field of dependability and cybersecurity. ARES 2019 highlights the various aspects of this very important field, following the tradition of previous ARES conferences, with a special focus on the crucial linkage between availability, reliability, security and privacy. This year we are again very happy to welcome famous keynote speakers from academia and industry Alastair MacWillson, Chair of Institute of Information Security and Chair of Qufaro@Bletchley Park and Awais Rashid, Professor of Cyber Security, University of Bristol.

2019, ARES has again received a high number of submissions. From the many submissions, we have selected the 21 best ones as full paper. The quality of submissions has steadily improved over the last years and the conference officers sometimes faced a difficult decision when selecting which papers should be accepted. This year's acceptance rate for full papers is only 20.75%. In addition, several workshops and short papers are included in the program and show intermediate results of ongoing research projects and offer interesting starting points for discussions.

Putting together ARES 2019 was a team effort. We first thank the authors for providing the content of the program. We are grateful to the program committee, which worked very hard in reviewing papers and providing feedback for authors. Finally, we thank all workshop chairs for their efforts in organizing interesting workshop sessions.

We would like to thank the University of Kent for hosting ARES 2019!

Enjoy ARES 2019 and Canterbury!

Steven Furnell

University of Plymouth, UK

Vasilis Katos

Bournemouth University, UK

Shujun Li

University of Kent, UK

Gareth Howells

University of Kent, UK

Julio Hernandez-Castro

University of Kent, UK

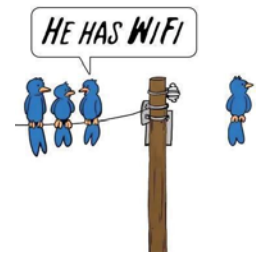


Useful Information

WIFI at ARES

There is WIFI available at the venue of ARES 2019: Eduroam

You will be supplied with a unique Wi-Fi log in order to access the University of Kent internet during your stay. **The login details can be found in the bag you receive at the registration.**



Addresses

Accommodation

Keynes College, University Road, University of Kent, Canterbury, Kent, CT2 7NP

Venue

University of Kent
Sibson Building
Giles Ln, Canterbury CT2 7NZ, UK

Emergency Numbers

999 – The main emergency number. This number shall be used for urgent emergencies.

112 – The International emergency number

101 – The emergency number for non-urgent emergencies. E.g. Your phone has been stolen.

111 – The non-emergency medical number. This number is used for injuries which are not life threatening.

Conference Office Contact

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Social Events and Details

Monday, August 26, 2019 – Welcome Reception

Meeting point: 18:30 at the registration desk

The official ARES & CD-MAKE 2019 Reception takes place at Eliot Hall. Enjoy delicious finger food with a bottle of lager, mingle and network. Eliot College is the longest established college and is named after the famous poet. From the dining hall windows there is a magnificent view of the Cathedral, which is spectacular at night.



Source: University of Kent, Hospitality

How to reach the Welcome Reception:

You can reach Eliot College from Keynes College within a couple of minutes. Entering Eliot college go directly across the atrium, through the double doors and down the stairs to the dining hall.

FINDING YOUR WAY AROUND THE CAMPUS

Venue: Sibson Building

Welcome Reception: Elliot Hall

Accommodation: Keynes College

Bus: Keynes College Stop

Legend:

- Colleges
- Other buildings
- Visitor Pay and Display parking
- Taxi Rank
- Permit-holder parking only
- Main road
- Minor road
- Footpath
- Footpath unsuitable for wheelchair users
- Main entrance, suitable for disabled access
- Main entrance
- Alternative access for wheelchair users
- Cycle path
- National cycle route 1
- Cycle lock up
- Cycle lock up, sheltered with secure access

Buildings labelled on map

| | | | | |
|-----------------------------------|--------------------------------------|--|---------------------------------|--|
| A1 Sports Pavilion | F1 Bossenden Court | H3 Jennison Building | J12 Senate | N3 Woodlands |
| B1 Cycle Hub | F2 Nickle Court | H4 Ingram Building | J13 Marlowe Building | N4 Rothford |
| C1 Maintenance Centre | F3 Stock Court | H5 Sports Centre | J14 Locke Building | N5 Olive Cottages |
| C2 Sibson Building | F4 Kemsdale Court | H6 Canterbury Enterprise Hub | J15 Eliot College Extension | N6 Keynes College |
| D1 Estates Department | F5 Purchas Court | H7 Stacey Building | J16 Jarman Building | N7 Turing College |
| D2 Design & Print Centre | F6 Elsdon Court | H8 Tanglewood | J17 Wigoder Building | P2 The Venue/Student Media Centre |
| D3 Cornwallis North-West | F7 Thornden Court | H9 Boiler House | K1 Registry | P3 Mandela Building |
| D4 George Allen Wing | F8 Grounds Maintenance | J2 Cornwallis Lecture Theatre | K3 Rutherford College Extension | P4 Beckett Court |
| D5 Cornwallis West | F9 Oaks Nursery | J3 Cornwallis South & South West | K4 Rutherford College | P5 Eliot College |
| D6 Woolf College | G1 Lypeatt Court | J4 Campus Security | K5 Tyler Court | P6 Careers and Employability Service |
| D7 Cayer-Fergusson Music Building | G2 Woodyds Bar | J5 Lupino Cinema | K6 Rutherford Annexe | Q2 Beverley Farmhouse |
| E1 Cornwallis North-East | G3 Park Wood Shop | J6 Grimsdell Building | L1 Hothe Court Farmhouse | Other organisations based on campus |
| E2 Cornwallis Maths Institute | G4 Park Wood Administration Building | J7 Unit for the Enhancement of Learning and Teaching | L2 Grimsdell Court | Blackwell's Bookshop/Caffé Nero |
| E3 Cornwallis South-East | G5 Bishopden Court | J8 Banks | L3 Donslead Court | Canterbury Enterprise Hub |
| Octagon | G6 Farthings Court | J9 Lumley Building | L4 Homesall Court | Open Colleges Network |
| E4 Darwin Houses | G7 Marley Court | J10 Gutbenkan Theatre | M1 Clowes Court | Kent and Medway |
| E5 Darwin College | H1 Kent Business School | J11 Templeman Library | M2 Willows Court | Canterbury Innovation Centre |
| E6 Cornwallis East | H2 Research and Development Building | | M3 Tudor Court | Jobshop |
| | | | M4 Medical Centre | |
| | | | N2 Pharmacy | |



Tuesday, August 27, 2019 – Canterbury City Tour

Meeting point: 18:00 Tower House Westgate Garden

A dedicated team of guides from Canterbury Guided Tours provide information of the highest quality as they take you on a journey into the past through narrow, cobbled streets and by crooked 17th-century houses. From medieval lanes and pilgrim inns to the majestic Cathedral's Precincts and the famous 'crooked house', this walking tour is an excellent way to see the sights and learn some history too!



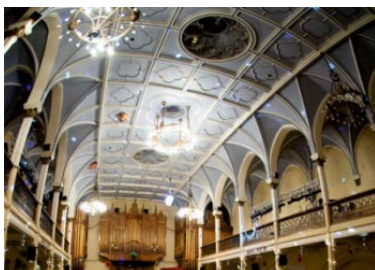
Source: University of Kent, Hospitality

The heart of the city is dominated by the magnificent and famous UNESCO World Heritage Site, Canterbury Cathedral. Ancient Roman walls, a Norman Castle and the medieval Westgate Towers encircle the charming cobbled streets which are dotted with historic buildings full of stories of pilgrimages and famous characters.

An eclectic mix of old and new, Canterbury is a vibrant city full of thriving independent businesses, restaurants and pavement cafes, making it a wonderful location for visiting families and groups. The annual Canterbury Festival boasts an array of international art, music and literary events, adding to the cultural significance of the city which, alongside its historic importance, attracts visitors from all over the world.

Wednesday, August 28, 2019 – Visit of the Dover White Cliffs & Conference Dinner at Dover Town Hall

Meeting point: 16:30 at the registration desk



Source: Dover Town Hall, Facebook

After visiting the famous Dover White Cliffs with a gaze at Dover Castle, we will gather in the stone hall for an aperitif. William Burges, one of the most important architects of the Victorian Age, refurbished the stone hall, originally founded in 1203, in 1853.

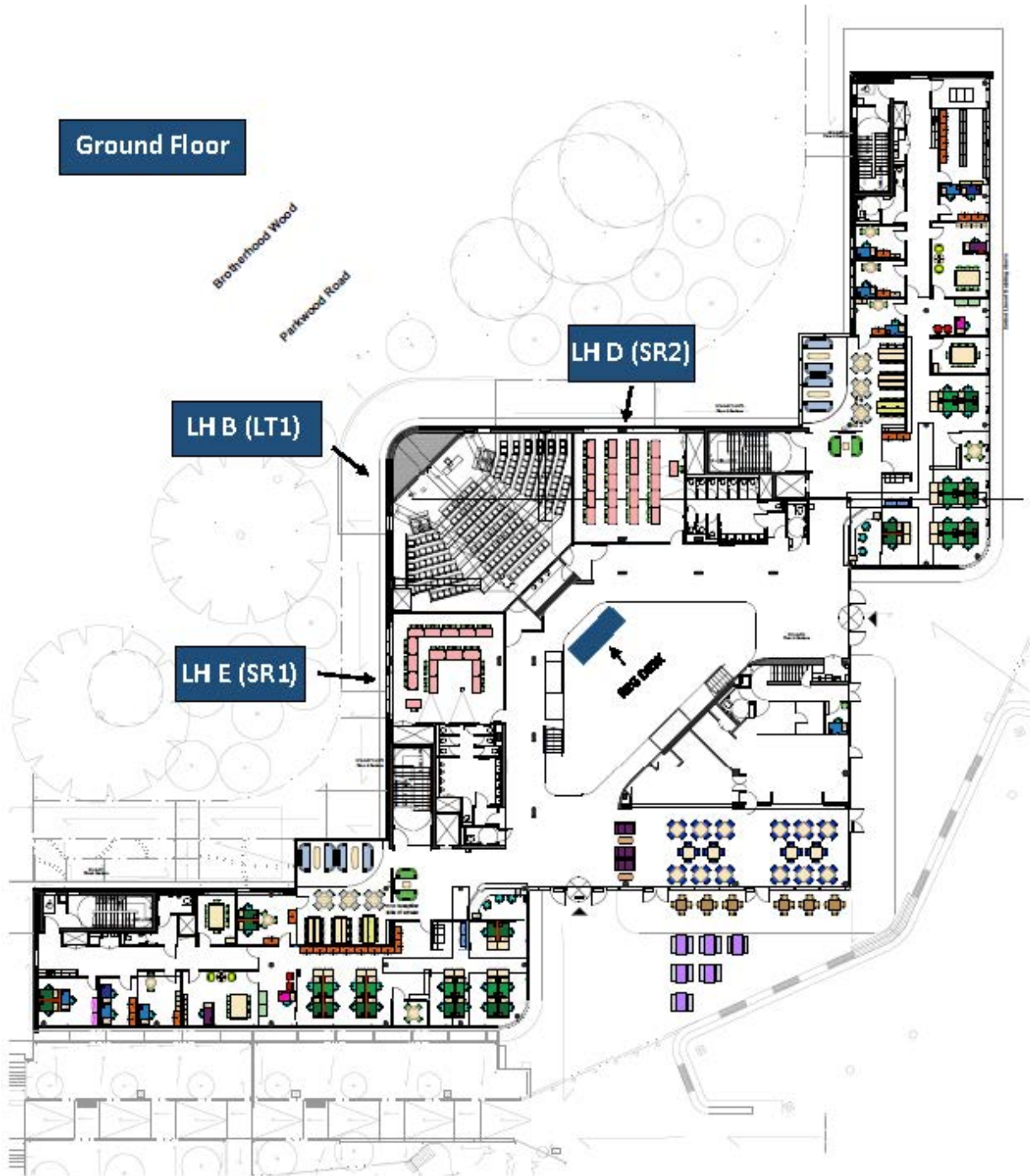
The windows are a wonderful example of Victorian stained glass and depict six Lord Wardens of the Cinque Ports in scenes from Dover's past. The hall is complete with flags and banners of the Cinque Ports, arms and armour and portraits of former dignitaries of Dover. The official Conference Dinner will be held in the Connaught Hall, which was originally opened in 1880's as a concert and meeting hall very much Victorian with pillars and balconies and a magnificent dance floor.



Source: <https://www.audleytravel.com/us/uk/england/things-to-do/white-cliffs-of-dover-and-dover-castl>

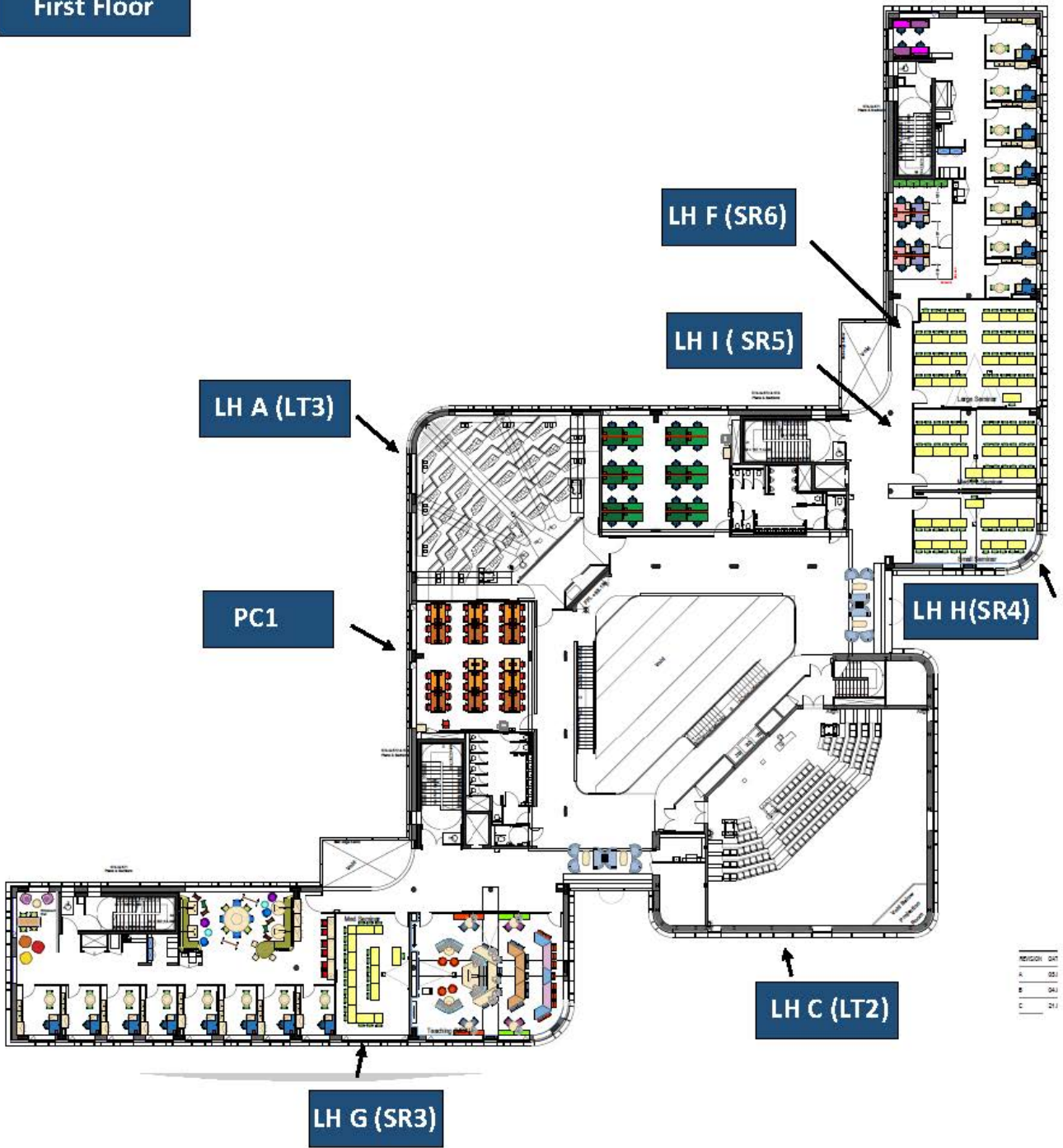


Room Plan Sibson Building





First Floor





Program Overview

Monday, 26.08.2019

| Time | Track 1 LHB (LT 1) | Track 2 LHC (LT 2) | Track 3 LHD (SR 2) | Track 4 LHE (SR 1) |
|---------------|--|--|--|--|
| 12:00 - 17:45 | Registration | | | |
| 12:30 - 13:30 | Lunch | | | |
| 13:30 - 14:45 | ARES Opening & Keynote Session Chair: Edgar Weippl, SBA Research, Austria LHA (LT 3) | | | |
| | ARES Opening Edgar Weippl, SBA Research, Austria; Shujun Li, University of Kent, UK; Steven Furnell, University of Plymouth, UK Keynote: Securing Our Future: The Importance of Academia in Closing the Cybersecurity Talent Gap Dr. Alastair MacWillson, Chair of Institute of Information Security and Chair of Qufaro@Bletchley Park | | | |
| 14:45 - 15:15 | Coffee Break | | | |
| 15:15 - 16:45 | ARES Full I Dependability and resilience Session Chair: Edgar Weippl, SBA Research, Austria | 5G-NS Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | PSCP I Session Chair: Stefan Schauer, AIT Austrian Institute of Technology, Austria | NG-SOC I Session Chair: Ewa Piatkowska (AIT), Austria |
| 16:45 - 17:00 | short Coffe Break | | | |
| 17:00 - 18:30 | ARES Short I Identity, authorization and privacy Session Chair: Andreas Holzinger, Medical University Graz, Austria | 5G-NS II Session Chair: Dr. Krzysztof Cabaj, Warsaw University of Technology, Poland | PSCP II Session Chair: Stefan Schauer, AIT Austrian Institute of Technology, Austria | NG-SOC II Session Chair: Reinder Wolthuis (TNO), Netherlands |
| 19:00 - 21:30 | Welcome Reception / Dinner Meeting point: 18:30 at the registration desk | | | |



Tuesday, 27.08.2019

| Time | Track 1 📍 LHB (LT 1) | Track 2 📍 LHC (LT2) | Track 3 📍 LHD (SR 2) | Track 4 📍 LHE (SR 1) | Track 5 📍 LHF (SR 6) | Track 6 📍 LHG (SR 3) |
|---------------|--|--|---|--|--|---|
| 08:00 - 16:30 | Registration | | | | | |
| 08:30 - 09:15 | CD-MAKE Opening Keynote 🗿 Session Chair: Andreas Holzinger, Medical University Graz, Austria 📍 LHA (LT 3) | | | | | |
| | Keynote: Toward to transparency of deep learning in medical imaging: Beyond quantitative to qualitative AI Yoichi Hayashi, Dept. Computer Science, Meiji University | | | | | |
| 09:15 - 10:45 | ARES Full II Best Paper Session 🗿 Session Chair: Steven Furnell, University of Plymouth, UK | CD-MAKE I Explainable I 🗿 Session Chair: Yoichi Hayashi, Dept. Computer Science, Meiji University | IoT-SECFOR I Keynote Session 🗿 Session Chair: Prof. Gareth Howells, University of Kent, UK | | CUING I Keynote Session 🗿 Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | IWSMR 🗿 Session Chair: Steffen Wendzel, Worms University of Applied Sciences, Germany |
| 10:45 - 11:10 | Coffee Break | | | | | |
| 11:10 - 12:20 | ARES Keynote 📍 LHA (LT 3) | | | | | |
| | Keynote: Why strong foundations matter: Lessons from developing CyBOK, the Cyber Security Body of Knowledge Awais Rashid, Professor of Cyber Security, University of Bristol | | | | | |
| 12:20 - 13:20 | Lunch | | | | | |
| 13:20 - 14:50 | ARES Full III Software security 🗿 Session Chair: Sheikh Mahbub Habib, Continental AG, Germany | CD-MAKE II Explainable II 🗿 Session Chair: Federico Cabitza, Università degli Studi di Milano-Bicocca, Italy | IoT-SECFOR II Keynote Session 🗿 Session Chair: Virginia Franqueira, University of Derby, UK | FARES I Protection and Detection 🗿 Session Chair: Lorenzo Musarella, Università Mediterranea di Reggio Calabria, Italy | CUING II 🗿 Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | LPW I 🗿 Session Chair: Paolo Palmieri, University College Cork, Ireland |
| 14:50 - 15:20 | Coffee Break | | | | | |



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|---------------|---|---|--|---|--|---|
| 15:20 - 16:20 | ARES Full IV Cryptographic mechanisms and applications I 👤 Session Chair: Mark Scanlon, University College Dublin, Ireland | CD-MAKE III Learning I 👤 Session Chair: Alex Freitas, University of Kent, UK | IoT-SECFOR III 👤 Session Chair: Virginia Franqueira, University of Derby, UK | FARES II Measurement and Robust Design 👤 Session Chair: Eduardo B. Fernandez, Florida Atlantic University, USA | CUING III 👤 Session Chair: Angelo Consoli, Scuola universitaria professionale della Svizzera italiana (SUPSI), Switzerland | LPW II 👤 Session Chair: Luca Calderoni, University of Bologna, Italy |
| 16:20 - 16:35 | short Coffe Break | | | | | |
| 16:35 - 17:35 | ARES Full V Cryptographic mechanisms and applications II 👤 Session Chair: Edgar Weippl, SBA Research, Austria | CD-MAKE IV Learning II 👤 Session Chair: Fang Chen, University of Technology, Sydney, Australia | IWSMA 👤 Session Chair: Peter Kieseberg, FH St.Pölten, Austria | | CUING IV 👤 Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | LPW III 👤 Session Chair: Paolo Palmieri, University College Cork, Ireland |
| 17:35 - 20:00 | City Walk 📍 Meeting point: 18:00 Tower House Westgate Garden | | | | | |



Wednesday 28.08.2019

| Time | Track 1 LHB (LT 1) | Track 2 LHC (LT2) | Track 3 LHD (SR 2) | Track 4 LHE (SR 1) | Track 5 LHF (SR 6) | Track 6 LHG (SR 3) | Track 7 LHH (SR 4) | Track 8 LHI (SR 5) |
|---------------|---|---|---|---|---|--|--|----------------------------|
| 08:00 - 16:00 | Registration | | | | | | | |
| 08:30 - 09:00 | <p>CD-MAKE Tutorial</p> <p>Session Chair: Andreas Holzinger, Medical University Graz, Austria</p> <p>LHA (LT 3)</p> | | | | | | | |
| | <p>Special Tutorial: What is missing in the evaluation of binary classifiers and diagnostic tests? Improved AUC measures & ROC explanations</p> <p>presented by André Carrington, Ottawa Hospital Research Institute, Canada</p> | | | | | | | |
| 09:00 - 10:00 | <p>CD-MAKE Keynote</p> <p>Session Chair: Andreas Holzinger, Medical University Graz, Austria</p> <p>LHA (LT 3)</p> | | | | | | | |
| | <p>Keynote: Explainable Artificial Intelligence – Methods, Applications & Recent Developments</p> <p>Wojciech Samek, Machine Learning Group at Fraunhofer Heinrich Hertz Institute</p> | | | | | | | |
| 10:00 - 10:30 | Coffee Break | | | | | | | |
| 10:30 - 12:00 | <p>ARES Full VI Network Security I</p> <p>Session Chair: Shujun Li, University of Kent, UK</p> | <p>CD-MAKE V Data & Knowledge I</p> <p>Session Chair: Jan Paralic, Technical University Kosice, Slovakia</p> | <p>SSE I Secure Software Development</p> <p>Session Chair: Juha Röning</p> | <p>IWSECC I</p> <p>Session Chair: Eduardo B. Fernandez, Florida Atlantic University, USA</p> | <p>WSDF I</p> <p>Session Chair: Virginia Franqueira, University of Derby, UK</p> | <p>CyberTIM I & WCTI Keynote Session</p> <p>Session Chair: Dr. Emmanouil Vasilomanolakis, Aalborg University, Denmark</p> | <p>IWCC I</p> <p>Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland</p> | <p>IFIP Meeting</p> |
| 12:00 - 13:00 | Lunch | | | | | | | |



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|---------------|---|--|--|---|--|---|---|---|
| 13:00 - 14:30 | ARES Full VII Web security and attacks 👤 Session Chair: Francesco Buccafurri, University of Reggio Calabria, Italy | CD-MAKE VI Data & Knowledge II 👤 Session Chair: Ljiljana Trtica-Majnaric, Josip Juraj Strossmayer University of Osijek, Croatia | SSE II Managing security on applications 👤 Session Chair: Lotfi ben Othmane, Iowa State University, USA | IWSECC II 👤 Session Chair: Eduardo B. Fernandez, Florida Atlantic University, USA | WSDF II 👤 Session Chair: Richard Overill, King's College London, UK | CyberTIM II Threat prediction, detection and mitigation 👤 Session Chair: Dr. Sheikh Mahbub Habib, Continental AG, Frankfurt, Germany | IWCC II 👤 Session Chair: Dr. Krzysztof Cabaj, Warsaw University of Technology, Poland | WISI I 👤 Session Chair: Stefan Jaksic, AIT Austrian Institute of Technology, Austria |
| 14:30 - 15:00 | Coffee Break | | | | | | | |
| 15:00 - 16:30 | ARES Full VIII Network Security I 👤 Session Chair: Mathias Fischer, University of Hamburg, Germany | CD-MAKE VII Security & Privacy 👤 Session Chair: Edgar Weippl, SBA-Research, Austria | | | WSDF III 👤 Session Chair: Virginia Franqueira, University of Derby, UK | CyberTIM III Threat Intelligence Sharing | IWCC III 👤 Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | WISI II 👤 Session Chair: Stefan Jaksic, AIT Austrian Institute of Technology, Austria |
| 17:00 - 23:30 | Conference Dinner Dover 📍 Meeting point: 16:30 at the registration desk | | | | | | | |



Thursday 29.08.2019

| Time | Track 1 LHB (LT 1) | Track 2 LHC (LT2) | Track 3 LHD (SR 2) | Track 4 LHE (SR 1) |
|---------------|--|---|--|--|
| 09:00 - 15:00 | Registration | | | |
| 09:30 - 11:00 | ARES Short II Threat detection and response Session Chair: Abdelmalek Benzekri, University of Toulouse, France | CD-MAKE VIII Learning III Session Chair: Epaminondas Kapetanios, Cognitive Computing, University of Westminster, London, UK | | BASS I Privacy, Authentication, and Access Control Session Chair: Peter Kieseberg, FH St.Pölten, Austria |
| 11:00 - 11:30 | Coffee Break | | | |
| 11:30 - 12:30 | CD-MAKE Keynote Session Chair: Peter Kieseberg, FH St.Pölten, Austria LHA (LT 3) | | | |
| | Keynote: Crossing the chasm: from Academia to Industry <i>Janet Bastiman, Venture Partner at MMC Ventures and Chief Science Officer at StoryStream</i> | | | |
| 12:30 - 13:30 | Lunch | | MAKE Journal Editorial Meeting LHC (LT2) | |
| 13:30 - 15:00 | ARES Short III Security Solutions Session Chair: Budi Arief, University of Kent, UK | CD-MAKE IX Learning IX Session Chair: Vasile Palade, Coventry University, UK | iPAT Panel Session Privacy and Trust with Publicly Available Data Session Chair: Jörg Daubert, Philipps University of Marburg, Germany | BASS II Communication networks Session Chair: Andrea Saracino, IIT-CNR, Italy |
| 15:00 - 15:15 | short Coffe Break | | | |

Detailed Program Monday 26.08.2019

| Time | Track 1 LH B (LT 1) | Track 2 LH C (LT 2) | Track 3 LH D (SR 2) | Track 4 LH E (SR 1) |
|---------------|---|---|--|---|
| 12:00 - 17:45 | Registration | | | |
| 12:30 - 13:30 | Lunch | | | |
| 13:30 - 14:45 | ARES Opening & Keynote Session Chair:Edgar Weippl, SBA Research, Austria LH A (LT 3) | | | |
| | <p>ARES Opening <i>Edgar Weippl, SBA Research, Austria; Shujun Li, University of Kent, UK; Steven Furnell, University of Plymouth, UK</i></p> <p>Keynote: Securing Our Future: The Importance of Academia in Closing the Cybersecurity Talent Gap <i>Dr. Alastair MacWillson, Chair of Institute of Information Security and Chair of Qufaro@Bletchley Park</i></p> | | | |
| 14:45 - 15:15 | Coffee Break | | | |
| 15:15 - 16:45 | ARES Full I Dependability and resilience Session Chair:Edgar Weippl, SBA Research, Austria | 5G-NS Session Chair:Wojciech Mazurczyk, Warsaw University of Technology, Poland | PCSCP I Session Chair:Stefan Schauer, AIT Austrian Institute of Technology, Austria | NG - SOC I Session Chair:Ewa Piatkowska, AIT Austrian Institute of Technology, Austria |
| | 15:15 - 16:45 | <p>Plug-and-Patch: Secure Value Added Services for Electric Vehicle Charging <i>Lucas Buschlinger (Fraunhofer, Germany), Markus Springer (Fraunhofer, Germany) and Maria Zhdanova (Fraunhofer, Germany)</i></p> <p>Efficient attack countermeasure selection accounting for recovery and action costs <i>Jukka Soikkeli (Imperial College London, United Kingdom), Luis Muñoz-González (Imperial College London, United Kingdom) and Emil Lupu (Imperial College London, United Kingdom)</i></p> <p>Using Context and Provenance to defend against USB-borne attacks <i>Tobias Mueller (University of Hamburg, Germany), Ephraim Zimmer (University of Hamburg, Germany) and Ludovico De Nittis (GNOME, Italy)</i></p> | <p>Keynote: Cooperative Security for 5G and the Internet <i>Raimo Kantola (Aalto University, Finland)</i></p> <p>Framework for Anticipatory Self-Protective 5G Environments <i>Marco Antonio Sotelo Monge (Universidad Complutense de Madrid, Spain) and Jorge Maestre Vidal (Indra, Digital Lab, Spain)</i></p> <p>6G Network Needs to Support Embedded Trust <i>Raimo Kantola (Aalto University, Finland)</i></p> | <p>An Overview of the SAURON Project <i>Stefan Schauer, AIT Austrian Institute of Technology, Austria</i></p> <p>A Novel Approach for Detecting Hybrid Threats in the Maritime Industry <i>Eleni-Maria Kalogeraki, University of Piraeus Research Center, Greece, Stefan Schauer, AIT Austrian Institute of Technology, Austria</i></p> <p>Modelling Cascading Effects of a Cyber-Attack on a Container Port <i>Sandra König, AIT Austrian Institute of Technology, Austria</i></p> <p>How Ports can combat the Hybrid Cyber Physical Security Threat: Lessons from the SAURON project <i>Richard Chisnall, Innovasec, UK</i></p> |
| 16:45 - 17:00 | short Coffe Break | | | |

| | ARES Short I Identity, authorization and privacy Session Chair:Andreas Holzinger, Medical University Graz, Austria | 5G-NS II Session Chair:Dr. Krzysztof Cabaj, Warsaw University of Technology, Poland | PCSCP II Session Chair:Stefan Schauer, AIT Austrian Institute of Technology, Austria | NG - SOC II Session Chair:Reinder Wolthuis (TNO), Netherlands |
|----------------------|--|--|---|--|
| 17:00 - 18:30 | <p>On the Exploitation of Online SMS Receiving Services to Forge ID Verification <i>Muhammad Hajian Berenjestanaki (University of Tehran, Iran), Mauro Conti (University of Padua, Italy) and Ankit Gangwal (University of Padova, Italy)</i></p> <p>Does “www.” Mean Better Transport Layer Security? <i>Eman Alashwali (University of Oxford, United Kingdom), Pawel Szalachowski (Singapore University of Technology and Design (SUTD), Singapore) and Andrew Martin (University of Oxford, United Kingdom)</i></p> <p>An Attribute-Based Privacy-Preserving Ethereum Solution for Service Delivery with Accountability Requirements <i>Francesco Buccafurri (DIIES – Universita’ Mediterranea di Reggio Calabria, Italy), Vincenzo De Angelis (DIIES – Universita’ Mediterranea di Reggio Calabria, Italy), Gianluca Lax (DIIES – Universita’ Mediterranea di Reggio Calabria, Italy), Lorenzo Musarella (DIIES – Universita’ Mediterranea di Reggio Calabria, Italy) and Antonia Russo (DIIES – Universita’ Mediterranea di Reggio Calabria, Italy)</i></p> | <p>Securing Ethernet-based Optical Fronthaul for 5G Network <i>Joo Yeon Cho (ADVA Optical Networking SE, Germany), Andrew Sergeev (ADVA Optical Networking Israel Ltd., Israel) and Jim Zou (ADVA Optical Networking SE, Germany)</i></p> <p>Towards a Security Architecture for Hybrid WMNs <i>Markus Theil (Technische Universitaet Ilmenau, Germany), Martin Backhaus (Technische Universitaet Ilmenau, Germany), Michael Rossberg (Technische Universitaet Ilmenau, Germany) and Guenter Schaefer (Technische Universitaet Ilmenau, Germany)</i></p> <p>Sniffing Detection within the Network: Revisiting Existing and Proposing Novel Approaches <i>Krzysztof Cabaj (Warsaw University of Technology, Poland), Marcin Gregorczyk (Warsaw University of Technology, Poland), Wojciech Mazurczyk (Warsaw University of Technology, Poland), Piotr Nowakowski (Warsaw University of Technology, Poland) and Piotr Żórawski (Warsaw University of Technology, Poland)</i></p> | <p>Threat modeling and automated generation of security requirements for critical transportation infrastructure <i>Christoph Schmittner, AIT Austrian Institute of Technology, Austria</i></p> <p>The ISPS implementation and Crisis Management <i>Ioannis Papagiannopoulos, Piraeus Port Authority, Greece</i></p> <p>CyberSec4Europe: Maritime Transport Scenarios <i>Eleni-Maria Kalogeraki, University of Piraeus Research Center, Greece</i></p> | <p>Anomaly Detection (DNS Ninja & ABC tool) <i>Irina Chiscop (TNO), Netherlands</i></p> <p>Adversarial Machine Learning <i>Ewa Piatkowska (AIT), Austria</i></p> <p>(Open Discussion) Future Challenges for SOCs <i>Moderator: Paul Smith (AIT), Austria</i></p> |
| 19:00 - 21:30 | <p style="text-align: center;">Welcome Reception / Dinner Meeting point: 18:30 at the registration desk</p> <p>The official ARES & CD-MAKE 2019 Reception takes place at Eliot Hall. Enjoy delicious finger food with a bottle of lager, mingle and network. Eliot College is the longest established college and is named after the famous poet. From the dining hall windows there is a magnificent view of the Cathedral, which is spectacular at night.</p> | | | |

| Detailed Program Tuesday 27.08.2019 | | | | | | |
|-------------------------------------|--|--|--|------------------------|--|--|
| Time | Track 1 LH B (LT 1) | Track 2 LH C (LT 2) | Track 3 LH D (SR 2) | Track 4 LH E (SR 1) | Track 5 LH F (SR 6) | Track 6 LH G (SR 3) |
| 08:00 - 16:30 | Registration | | | | | |
| 08:30 - 09:15 | CD-MAKE Opening Keynote Session Chair: Andreas Holzinger, Medical University Graz, Austria, Peter Kieseberg, FH St. Pölten, Austria, Edgar Weippl, SBA-Research, Austria, A Min Tjoa, TU Vienna, Austria LH A (LT 3) | | | | | |
| | Keynote: Toward to transparency of deep learning in medical imaging: Beyond quantitative to qualitative AI Yoichi Hayashi, Dept. Computer Science, Meiji University | | | | | |
| 09:15 - 10:45 | ARES Full II Best Paper Session Session Chair: Steven Furnell, University of Plymouth, UK | CD-MAKE I Explainable I Session Chair: Yoichi Hayashi, Dept. Computer Science, Meiji University | IoT-SECFOR I Session Chair: Prof. Gareth Howells, University of Kent, UK | | CUING I Keynote Session Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | IWSMR Session Chair: Steffen Wendzel, Worms University of Applied Sciences, Germany |
| | Thieves in the Browser: Web-based Cryptojacking in the Wild Marius Musch (TU Braunschweig, Germany), Christian Wressnegger (TU Braunschweig, Germany), Martin Johns (TU Braunschweig, Germany) and Konrad Rieck (TU Braunschweig, Germany) | KANDINSKY Patterns as IQ-Test for machine learning Andreas Holzinger (Medical University Graz, Austria), Michael Kickmeier-Rust (University of Teacher Education Sankt Gallen, Switzerland) and Heimo Müller (Medical University Graz, Austria) | Invited talk: Practical IoT Device Authentication with ICMetrics Prof. Gareth Howells, University of Kent, UK | | Introductory talk I: Criminal Use of Information Hiding Initiative – an update Wojciech Mazurczyk, Warsaw University of Technology & Stichting CULng Foundation, The Netherlands | Keynote: The need of standardisation and reference collections in digital forensics Christian Hummert (Central Office for Information Technology in the Security Sector (ZITIS) in Germany) |
| | Behavior-Aware Network Segmentation using IP Flows Juraj Smeriga (Institute of Computer Science, Masaryk University, Czechia) and Tomas Jirsik (Institute of Computer Science, Masaryk University, Czechia) | New Frontiers in Explainable AI: Understanding the GI to Interpret the GO Federico Cabitza (Università degli Studi di Milano-Bicocca, Italy), Andrea Campagner (Università degli Studi di Milano-Bicocca, Italy) and Davide Ciucci (Università degli Studi di Milano-Bicocca, Italy) | A Secure Publish/Subscribe Protocol for Internet of Things Lukas Malina (Brno University of Technology, Czechia), Gautam Srivastava (Brandon University, Canada), Petr Dzurenda (Brno University of Technology, Czechia), Jan Hajny (Brno University of Technology, Czechia) and Radek Fudjak (Brno University of Technology, Czechia) | | Keynote: Steganography and steganalysis: Lessons learnt the hard way over 15 years of academic practice. Prof. Julia Hernandez-Castro, University of Kent, UK | Analysis of User Evaluations in Security Research Peter Hamm (Goethe University Frankfurt, Germany), David Harborth (Goethe University Frankfurt, Germany) and Sebastian Pape (Goethe University Frankfurt, Germany) |
| | Data-driven Curation, Learning and Analysis for Inferring Evolving IoT Botnets in the Wild Morteza Safaei Pour (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Antonio Mangino (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Kurt Friday (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Matthias Rathbun (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Elias Bou-Harb (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Farkhund Iqbal (Zayed University, United Arab Emirates), Khaled Shaban (Qatar University, Qatar) and Abdelkarim Erradi (Qatar University, Qatar) | | | | Keynote: Steganography and steganalysis: Lessons learnt the hard way over 15 years of academic practice. Prof. Julia Hernandez-Castro, University of Kent, UK | The power of interpretation: Qualitative methods in cybersecurity research Damjan Fujs (University of Maribor, Slovenia), Anže Mihelič (University of Maribor, Slovenia) and Simon Vrhovec (University of Maribor, Slovenia) |
| 10:45 - 11:10 | Coffee Break | | | | | |
| 11:10 - 12:20 | ARES Keynote Session Chair: Mark Scanlon, University College Dublin, Ireland LH A (LT 3) | | | | | |
| | Keynote: Why strong foundations matter: Lessons from developing CyBOK, the Cyber Security Body of Knowledge Awais Rashid, Professor of Cyber Security, University of Bristol | | | | | |
| | Gridradar - a distributed frequency measurement system Christian Krämer (Gridradar, Germany) | | | | | |
| 12:20 - 13:20 | Lunch | | | | | |

| | ARES Full III Software security Session Chair: Sheikh Mahbub Habib, Continental AG, Germany | CD-MAKE II Explainable II Session Chair: Federico Cabitza, Università degli Studi di Milano-Bicocca, Italy | IoT-SECFOR II Session Chair: Virginia Franqueira, University of Derby, UK | FARES I Protection and Detection Session Chair: Lorenzo Musarella, Università Mediterranea di Reggio Calabria, Italy | CUING II Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | LPW I Session Chair: Paolo Palmieri, University College Cork, Ireland |
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| 13:20 - 14:50 | <p>A First ISA-Level Characterization of EM Pulse Effects on Superscalar Microarchitectures – A Secure Software Perspective <i>Julien Proy (INRIA, France), Karine Heydemann (LIP6 – Sorbonne Université, France), Fabien Majéric (Gemalto/Université Jean-Monnet, France), Alexandre Berzati (INRIA, France) and Albert Cohen (Google, France)</i></p> <p>Obfuscation-Resilient Code Recognition in Android Apps <i>Johannes Feichtner (Graz University of Technology, Austria) and Christof Rabensteiner (Graz University of Technology, Austria)</i></p> <p>Costing Secure Software Development Study – A Systematic Mapping Study <i>Elaine Venson (University of Southern California, United States), Xiaomeng Guo (University of Southern California, United States), Zidi Yan (University of Southern California, United States) and Barry Boehm (University of Southern California, United States)</i></p> | <p>Automated Machine Learning (Auto-ML) As a Novel Approach to Investigate the Trade-off Between Accurate and Interpretable Classification Models <i>Alex Freitas (University of Kent, United Kingdom)</i></p> <p>Estimating the Driver Status Using Long Short Term Memory <i>Shokoufeh Monjezi Kouchak (Arizona State University, United States) and Ashraf Gaffar (Arizona State University, United States)</i></p> <p>Using Relational Concept Networks for Explainable Decision Support <i>Jeroen Voagd (TNO, Netherlands), Paolo de Heer (TNO, Netherlands), Kim Veltman, (TNO, Netherlands) Patrick Hanckmann (TNO, Netherlands) and Jeroen van Lith (TNO, Netherlands)</i></p> | <p>Invited Talk: Trust and Security in Internet of Vehicles (IoV) <i>Dr Asma Adnane, Loughborough University, UK</i></p> <p>Privacy-Enhancing Fall Detection from Remote Sensor Data Using Multi-Party Computation <i>Pradip Mainali (OneSpan, Belgium) and Carlton Shepherd (OneSpan, United Kingdom)</i></p> | <p>A Pattern for a Virtual Network Function (VNF) <i>Ahmed Alwakeel (Florida Atlantic University, United States), Abdulrahman Alnaim (Florida Atlantic University, United States) and Eduardo B. Fernandez (Florida Atlantic University, United States)</i></p> <p>Near-optimal Evasion of Randomized Convex-inducing Classifiers in Adversarial Environments <i>Pooria Madani (York University, Canada) and Natalija Vlajic (York University, Canada)</i></p> <p>AMON: an Automaton MONitor for Industrial Cyber-Physical Security <i>Giuseppe Bernieri (Department of Mathematics University of Padua, Italy), Mauro Conti (Department of Mathematics University of Padua, Italy) and Gabriele Pozzan (Department of Mathematics University of Padua, Italy)</i></p> <p>Decision Support for Mission-Centric Cyber Defence <i>Michal Javornik (Masaryk University, Czechia), Jana Komárková (Masaryk University, Czechia) and Martin Husák (Masaryk University, Czechia)</i></p> | <p>Protocol-independent Detection of Messaging Ordering Network Covert Channels <i>Steffen Wendzel (Worms University of Applied Sciences and Fraunhofer FKIE, Germany)</i></p> <p>Introducing Dead Drops to Network Steganography using ARP-Caches and SNMP-Walks <i>Tobias Schmidbauer (University of Hagen, Germany), Steffen Wendzel (Worms University of Applied Sciences and Fraunhofer FKIE, Germany), Aleksandra Mileva (University Goce Delcev, Macedonia) and Wojciech Mazurczyk (Warsaw University of Technology, Faculty of Electronics and Information Technology, Institute of Telecommunications, Poland)</i></p> <p>Fine-tuning of Distributed Network Covert Channels Parameters and Their Impact on Undetectability <i>Krzysztof Cabaj (Warsaw University of Technology, Poland), Wojciech Mazurczyk (Warsaw University of Technology, Poland), Piotr Nowakowski (Warsaw University of Technology, Poland) and Piotr Żórawski (Warsaw University of Technology, Poland)</i></p> <p>Towards Reversible Storage Network Covert Channels <i>Wojciech Mazurczyk (Warsaw University of Technology, Poland), Przemysław Szary (Warsaw University of Technology, Poland), Steffen Wendzel (Worms University of Applied Sciences and Fraunhofer FKIE, Germany) and Luca Cavaglione (CNR – IMATI, Italy)</i></p> | <p>Keynote: Location privacy from a statistical perspective <i>Dr George Theodorakopoulos, Cardiff University, UK</i></p> <p>eBook Readers, Location Surveillance and the Threat to Freedom of Association <i>Stephen Wicker (Cornell University, United States)</i></p> |
| 14:50 - 15:20 | Coffee Break | | | | | |

| | ARES Full IV Cryptographic mechanisms and applications I Session Chair: Mark Scanlon, University College Dublin, Ireland | CD-MAKE III Learning I Session Chair: Alex Freitas, University of Kent, UK | IoT-SECFOR III Session Chair: Virginia Franqueira, University of Derby, UK | FARES II Measurement and Robust Design Session Chair: Lorenzo Musarella, Università Mediterranea di Reggio Calabria, Italy | CUING III Session Chair: Angelo Consoli, Scuola universitaria professionale della Svizzera italiana (SUPSI), Switzerland | LPW II Session Chair: Luca Calderoni, University of Bologna, Italy |
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| 15:20 - 16:20 | <p>Practical Group-Signatures with Privacy-Friendly Openings Stephan Krenn (AIT Austrian Institute of Technology GmbH, Austria), Kai Samelin (TÜV Rheinland i-sec GmbH, Germany) and Christoph Striecks (AIT Austria, Austria)</p> <p>E2E Verifiable Borda Count Voting System without Tallying Authorities Samiran Bag (The University of Warwick, United Kingdom), Muhammad Ajmal Azad (University of Derby, United Kingdom) and Feng Hao (The University of Warwick, United Kingdom)</p> | <p>Guided Machine Learning Florian Westphal (Blekinge Institute of Technology, Sweden), Niklas Lavesson (Jönköping University, Sweden) and Håkan Grahn (Blekinge Institute of Technology, Sweden)</p> <p>Using Ontologies to Express Prior Knowledge for Genetic Programming Stefan Prieschl (RISC Software GmbH, Johannes Kepler University, Hagenberg and Linz, Austria), Dominic Girardi (RISC Software GmbH, Johannes Kepler University, Hagenberg and Linz, Austria) and Gabriel Kronberger (Josef Ressel Centre for Symbolic Regression, University of Applied Sciences Upper Austria, Hagenberg, Austria)</p> | <p>IoT-HarPSecA: A Framework for Facilitating the Design and Development of Secure IoT Devices Musa Samaila (Universidade da Beira Interior and Instituto de Telecomunicações, Covilhã, Portugal), Moser José (Universidade da Beira Interior and Instituto de Telecomunicações, Covilhã, Portugal), João Bernardo Sequeiros (Universidade da Beira Interior and Instituto de Telecomunicações, Covilhã, Portugal), Mario Freire (Universidade da Beira Interior and Instituto de Telecomunicações, Covilhã, Portugal) and Pedro Inácio (Universidade da Beira Interior and Instituto de Telecomunicações, Covilhã, Portugal)</p> <p>Securing the Device Drivers of Your Embedded Systems: Framework and Prototype Zhuohua Li (The Chinese University of Hong Kong, Hong Kong), Jincheng Wang (The Chinese University of Hong Kong, Hong Kong), Mingshen Sun (Baidu X-Lab, United States) and John C.S. Lui (The Chinese University of Hong Kong, Hong Kong)</p> <p>Energy Attack in LoRaWAN: Experimental Validation Konstantin Mikhaylov (University of Oulu, Finland), Radek Fudjak (Brno University of Technology, Czechia), Ari Pouttu (University of Oulu, Finland), Miroslav Voznak (Technical University of Ostrava, Czechia), Lukas Malina (Brno University of Technology, Czech Republic) and Petr Mlynek (Brno University of Technology, Czechia)</p> <p>Wrap up Workshop Chairs</p> | <p>Managing the over-estimation of resilience Thomas Clédel (IMT Atlantique, France), Frédéric Cuppens (TELECOM Bretagne, France) and Nora Cuppens-Boulahia (IMT Atlantique, France)</p> <p>GDPR Compliance in Cybersecurity Software: A Case Study of DPIA in Information Sharing Platform Martin Horák (Masaryk University, Czechia), Václav Stupka (Masaryk University, Czechia) and Martin Husák (Masaryk University, Czechia)</p> <p>Cyber Security Skill Set Analysis for Common Curriculum Development Muhammad Mudassar Yamin (Norwegian University of Science and Technology, Norway) and Basel Katt (Norwegian University of Science and Technology, Norway)</p> | <p>Detection and Analysis of Tor Onion Services Martin Steinebach (Fraunhofer, Germany), Marcel Schäfer (Fraunhofer CESE, United States) and York Yannikos (Fraunhofer, Germany)</p> <p>Productivity and Patterns of Activity in Bug Bounty Programs: Analysis of HackerOne and Google Vulnerability Research Donatello Luna (Tribunale di Busto Arsizio, Italy), Luca Allodi (Eindhoven University of Technology, Netherlands) and Marco Cremonini (University of Milan, Italy)</p> | <p>Securing V2X Communications for the Future - Can PKI Systems offer the answer? Thanassis Giannetsos (Technical University of Denmark, Denmark) and Ioannis Krontiris (European Research Center, Huawei Technologies, Germany)</p> <p>Location Tracking Using Smartphone Accelerometer and Magnetometer Traces Khuong An Nguyen (Department of Computer Science, Royal Holloway, University of London, United Kingdom), Raja Naem Akram (ISG-Smart Card Centre, Royal Holloway, University of London, United Kingdom), Konstantinos Markantonakis (ISG-Smart Card Centre, Royal Holloway, University of London, United Kingdom), Zhiyuan Luo (Royal Holloway, University of London, United Kingdom) and Chris Watkins (Royal Holloway, University of London, United Kingdom)</p> |
| 16:20 - 16:35 | short Coffe Break | | | | | |

| | ARES Full V Cryptographic mechanisms and applications II Session Chair:Edgar Weippl, SBA Research, Austria | CD-MAKE IV Learning II Session Chair:Fang Chen, University of Technology, Sydney, Australia | IWSMA Session Chair:Peter Kleseberg, FH St.Pölten, Austria | | CUING IV Session Chair:Wojciech Mazurczyk, Warsaw University of Technology, Poland | LPW III Session Chair:Paolo Palmieri, University College Cork, Ireland |
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| 16:35 - 17:35 | <p>SET-OT: A Secure Equality Testing Protocol Based on Oblivious Transfer <i>Ferhat Karakoç (Kuveyt Türk Participation Bank Research and Development Center, Turkey), Majid Nateghizad (Cyber Security Group, Department of Intelligent Systems, Delft University of Technology, Netherlands) and Zekeriya Erkin (Cyber Security Group, Department of Intelligent Systems, Delft University of Technology, Netherlands)</i></p> <p>Anonymous Identity Based Encryption with Traceable Identities <i>Olivier Blazy (Université de Limoges, France), Laura Brouilhet (Université de Limoges, France) and Duong-Hieu Phan (Université de Limoges, France)</i></p> | <p>Real Time Hand Movement Trajectory Tracking for Enhancing Dementia Screening in Ageing Deaf Signers of British Sign Language <i>Xing Liang (University of Westminster, United Kingdom), Epaminondas Kapetanios (University of Westminster, United Kingdom), Bencie Woll (University College London, United Kingdom) and Anastasia Angelopoulou (University of Westminster, United Kingdom)</i></p> <p>Commonsense Reasoning using Theorem Proving and Machine Learning <i>Sophie Siebert (Hochschule Harz, Germany), Frieder Stolzenburg (Harz University of Applied Sciences, Germany) and Claudia Schon (University of Koblenz Landau, Germany)</i></p> | <p>Analyzing Android's File-Based Encryption: Information Leakage through Unencrypted Metadata <i>Tobias Groß (Friedrich-Alexander University, Germany), Matanat Ahmadova (University of Bonn, Germany) and Tilo Müller (Friedrich-Alexander University, Germany)</i></p> <p>Post-Quantum Cryptography in Embedded Systems <i>Soundes Marzougui (TU Darmstadt, Germany) and Juliane Krämer (TU Darmstadt, Germany)</i></p> <p>The Internet Banking [in]Security Spiral: Past, Present, and Future of Online Banking Protection Mechanisms based on a Brazilian case study <i>Marcus Botacin (Federal University of Brazil, Brazil), Anatoli Kalysch (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany), Tilo Mueller (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany) and Andre Gregio (UFPR, Brazil)</i></p> | | <p>SocialTruth Project Approach to Online Disinformation (Fake News) Detection and Mitigation <i>Michał Choras (UTP Bydgoszcz, Poland), Marek Pawlicki (Uniwersytet Technologiczno-Przyrodniczy, Poland) and Rafal Kozik (Institute of Telecommunications, UTP Bydgoszcz, Poland)</i></p> <p>Privacy and Robust Hashes <i>Martin Steinebach (Fraunhofer, Germany), Sebastian Lutz (Fraunhofer, Germany) and Huajian Liu (Fraunhofer, Germany)</i></p> | <p>A Location Privacy Analysis of Bluetooth Mesh <i>Matthias Caesar (Fraunhofer SIT, Fraunhofer Institute for Secure Information Technology SIT, Germany) and Jan Steffan (Fraunhofer SIT, Fraunhofer Institute for Secure Information Technology SIT, Germany)</i></p> <p>DEMISE: Interpretable Deep Extraction and Mutual Information Selection Techniques for IoT Intrusion Detection <i>Paul Yoo (Birkbeck, University of London, United Kingdom), Taufiq Asyhari (Coventry University, United Kingdom), Yoonchan Jhi (Samsung Electronics, South Korea), Kamal Taha (Khalifa University, United Arab Emirates) and Lounis Chermak (Cranfield University, United Kingdom)</i></p> |
| 17:35 - 20:00 | City Walk Meeting point: 18:00 Tower House Westgate Garden | | | | | |
| | A dedicated team of guides from Canterbury Guided Tours provide information of the highest quality as they take you on a journey into the past through narrow, cobbled streets and by crooked 17th-century houses. From medieval lanes and pilgrim inns to the majestic Cathedral's Precincts and the famous 'crooked house', this walking tour is an excellent way to see the sights and learn some history too! | | | | | |

| Detailed Program Wednesday 28.08.2019 | | | | | | | | |
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| Time | Track 1 LH B (LT 1) | Track 2 LH C (LT 2) | Track 3 LH D (SR 2) | Track 4 LH E (SR 1) | Track 5 LH F (SR 6) | Track 6 LH G (SR 3) | Track 7 LH H (SR 4) | Track 8 LH I (SR 5) |
| 08:00 - 16:00 | Registration | | | | | | | |
| 08:30 - 09:00 | CD-MAKE Tutorial Session Chair: Andreas Holzinger, Medical University Graz, Austria LH A (LT 3) | | | | | | | |
| | Special Tutorial: What is missing in the evaluation of binary classifiers and diagnostic tests? Improved AUC measures & ROC explanations presented by André Carrington, Ottawa Hospital Research Institute, Canada | | | | | | | |
| 09:00 - 10:00 | CD-MAKE Keynote Session Chair: Andreas Holzinger, Medical University Graz, Austria LH A (LT 3) | | | | | | | |
| | Keynote: Explainable Artificial Intelligence – Methods, Applications & Recent Developments Wojciech Samek, Machine Learning Group at Fraunhofer Heinrich Hertz Institute | | | | | | | |
| 10:00 - 10:30 | Coffee Break | | | | | | | |
| 10:30 - 12:00 | ARES Full VI Network Security I Session Chair: Shujun Li, University of Kent, UK | CD-MAKE V Data & Knowledge I Session Chair: Jan Paralic, Technical University Kosice, Slovakia | SSE I Secure Software Development Session Chair: Juha Röning, University of Oulu, Finland | IWSECC I Session Chair: Eduardo B. Fernandez, Florida Atlantic University, USA | WSDF I Session Chair: Virginia Franqueira, University of Derby, UK | CyberTIM I & WCTI Keynote Session Session Chair: Dr. Emmanouil Vasilomanolakis, Aalborg University, Denmark | IWCC I Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | IFIP Meeting |
| | Towards Efficient Reconstruction of Attacker Lateral Movement Florian Wilkens (University of Hamburg, Germany), Steffen Haas (University of Hamburg, Germany), Dominik Kaaser (University of Hamburg, Germany), Peter Kling (University of Hamburg, Germany) and Mathias Fischer (University of Hamburg, Germany) | Physiological Indicators for User Trust in Machine Learning with Influence Enhanced Fact-Checking Jianlong Zhou (University of Technology, Sydney, Australia), Huaiwen Hu (CSIRO, Australia), Zhidong Li (University of Technology, Sydney, Australia), Kun Yu (University of Technology, Sydney, Australia) and Fang Chen (University of Technology, Sydney, Australia) | Invited Talk: Securing Software Supply Chains: A Case for New Research in Software Security? Achim Brucker, University of Exeter, UK Learning Software Security in Context: An Evaluation in Open Source Software Development Environment Shao-Fang Wen (Norwegian University of Science and Technology, Norway) and Basel Katt (Norwegian University of Science and Technology, Norway) | Welcome talk IWSSEC 2019 Leveraging Kernel Security Mechanisms to Improve Container Security: a Survey Maxime Bélaïr (Orange Labs, France), Sylvie Laniece (Orange Labs, France) and Jean-Marc Menaud (IMT Atlantique, INRIA, LS2N, France) | Welcome Virginia Franqueira, University of Derby, UK Keynote: Immersive Virtual Insanity: Exploring Immersive Virtual Reality Security & Forensics Ibrahim (Abe) Baggili, Elder Family Endowed Chair of Computer Science & Cybersecurity at the Tagliatela College of Engineering, University of New Haven | Keynote: CTI in Cyber Defence: Challenges and opportunities Dr. Panayotis Kikiras (European Defense Agency) WCTI Zero Residual Attacks on Industrial Control Systems and Stateful Countermeasures Hamid Reza Ghaeini (Singapore University of Technology and Design, Singapore), Nils Ole Tippenhauer (CISPA, Germany) and Jianying Zhou (Singapore University of Technology and Design, Singapore) | Keynote: Internet-wide Measurements to Prevent and Combat Cybercrime: The Case of DNS Zone Poisoning Maciej Korczyński (University of Grenoble, France) An Analysis Framework for Product Prices and Supplies in Darknet Marketplace York Yannikos (Fraunhofer, Germany), Julian Heeger (Fraunhofer, Germany) and Maria Brockmeyer (TU Darmstadt, Germany) | Limits in the data for detecting criminals on social media Andrea Tundis (TU Darmstadt, Germany), Leon Böck (Technische Universität Darmstadt (TUDA), Germany), Victoria Stanilescu (Siemens AG, Germany) and Max Mühlhäuser (TU Darmstadt, Germany) |
| | Strong Tenant Separation in Cloud Computing Platforms Michael Pfeiffer (Technische Universität Ilmenau, Germany), Michael Rossberg (Technische Universität Ilmenau, Germany), Simon Buttgerit (Technische Universität Ilmenau, Germany) and Guenter Schaefer (Technische Universität Ilmenau, Germany) | Detection of Diabetic Retinopathy and Maculopathy in Eye Fundus Images Using Deep Learning and Image Augmentation Sarni Rahim (Coventry University, United Kingdom), Vasile Palade (Coventry University, United Kingdom), Ibrahim Almakky (Coventry University, United Kingdom) and Andreas Holzinger (Medical University Graz, Austria) | The Security Intention Meeting Series as a way to increase visibility of software security decisions in agile development projects Inger Anne Tøndel (Norwegian University of Science and Technology, Norway), Daniela S. Cruzes (SINTEF Digital, Norway), Martin Gilje Jaatun (SINTEF Digital, Norway) and Kalle Rindell (SINTEF Digital, Norway) | A Misuse Pattern for Compromising VMs via Virtual Machine Escape in NFV Abdulrahman Alnaim (Florida Atlantic University, United States), Ahmed Alwakeel (Florida Atlantic University, United States) and Eduardo B. Fernandez (Florida Atlantic University, United States) | Methodology for the Automated Metadata-Based Classification of Incriminating Digital Forensic Artefacts Xiaoyu Du (University College Dublin, Ireland) and Mark Scanlon (University College Dublin, Ireland) | Short Discussion | Keynote: Internet-wide Measurements to Prevent and Combat Cybercrime: The Case of DNS Zone Poisoning Maciej Korczyński (University of Grenoble, France) An Analysis Framework for Product Prices and Supplies in Darknet Marketplace York Yannikos (Fraunhofer, Germany), Julian Heeger (Fraunhofer, Germany) and Maria Brockmeyer (TU Darmstadt, Germany) | Limits in the data for detecting criminals on social media Andrea Tundis (TU Darmstadt, Germany), Leon Böck (Technische Universität Darmstadt (TUDA), Germany), Victoria Stanilescu (Siemens AG, Germany) and Max Mühlhäuser (TU Darmstadt, Germany) |
| Blockchain Trilemma Solver Mauro Conti (University of Padua, Italy), Ankit Gangwal (University of Padua, Italy) and Michele Toderò (University of Padua, Italy) | Semi-automated Quality Assurance for Domain-expert-driven Data Exploration – An Application to Principal Component Analysis Sandra Wartner (RISC Software GmbH, Austria), Manuela Wiesinger-Widi (RISC Software GmbH, Austria), Dominic Girardi (RISC Software GmbH, Austria), Dieter Furthner (Department of Pediatrics and Adolescent Medicine, Salzkammergut-Klinikum, Vocklabruck, Austria) and Klaus Schmitt (Department of Pediatrics and Adolescent Medicine, Kepler University Hospital, Linz, Austria) | | | | | | | |
| 12:00 - 13:00 | Lunch | | | | | | | |

| 13:00 - 14:30 | ARES Full VII Web security and attacks Session Chair: Francesco Buccafurri, University of Reggio Calabria, Italy | CD-MAKE VI Data & Knowledge II Session Chair: Ljiljana Trtica-Majnaric, Josip Juraj Strossmayer University of Osijek, Croatia | SSE II Managing security on applications Session Chair: Lotfi ben Othmane, Iowa State University, USA | IWSECC II Session Chair: Eduardo B. Fernandez, Florida Atlantic University, USA | WSDP II Session Chair: Richard Overill, King's College London, UK | CyberTIM II Threat prediction, detection and mitigation Session Chair: Dr. Sheikh Mahbub Habib, Continental AG, Frankfurt, Germany | IWCC II Session Chair: Dr. Krzysztof Cabaj, Warsaw University of Technology, Poland | WISI I Session Chair: Stefan Jaksic, AIT Austrian Institute of Technology, Austria |
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| | <p>PoliDOM: Mitigation of DOM-XSS by Detection and Prevention of Unauthorized DOM Tampering Junaid Iqbal (University of New Brunswick, Canada), Ratinder Kaur (University of Saskatchewan, Canada) and Natalia Stakhanova (University of Saskatchewan, Canada)</p> <p>Towards a framework for detecting advanced Web bots Christos Iliou (Information Technologies Institute, CERTH, Greece), Theodoros Kostoulas (Department of Computing and Informatics, Bournemouth University, United Kingdom), Theodora Tsikrika (Information Technologies Institute, CERTH, Greece), Vasilis Katos (Department of Computing and Informatics, Bournemouth University, United Kingdom), Stefanos Vrochidis (Information Technologies Institute, CERTH, Greece)</p> <p>Characterizing the Redundancy of DarkWeb .onion Services Pavlo Burda (Eindhoven University of Technology, Netherlands), Coen Boot (Radboud University, Netherlands) and Luca Allodi (Eindhoven University of Technology, Netherlands)</p> | <p>Ranked MSD: A New Feature Ranking and Feature Selection Approach for Biomarker Identification Ghanshyam Verma (Insight Centre for Data Analytics, National University of Ireland Galway, Ireland), Alok Kumar Jha (Insight Centre for Data Analytics, National University of Ireland Galway, Ireland), Dietrich Reibholz-Schuhmann (ZB MED – Information Center for Life Sciences, University of Cologne, Germany) and Michael G. Madden (School of Computer Science, National University of Ireland Galway, Ireland)</p> <p>How to improve the adaptation phase of the CBR in the medical domain Ludmila Puztová (Technical University of Kosice, Slovakia), Frantisek Babic (Technical University of Kosice, Slovakia), Jan Paralic (Technical University of Kosice, Slovakia) and Zuzana Paraličová (University of Pavol Jozef Šafárik, Slovakia)</p> <p>Machine Learning for the Family Doctor: A Case of Cluster Analysis for studying and prediction of Aging Comorbidities and Frailty František Babič (Technical university of Kosice, Slovakia), Ljiljana Trtica Majnaric (Josip Juraj Strossmayer University of Osijek, Croatia), Sanja Bekic (Josip Juraj Strossmayer University of Osijek, Croatia) and Andreas Holzinger (Medical University Graz, Austria)</p> <p>Machine Learning Explainability Through Comprehensible Decision Trees Alberto Blanco-Justicia (Universitat Rovira i Virgili, Spain) and Josep Domingo-Ferrer (Universitat Rovira i Virgili, Spain)</p> | <p>Managing Security in Software Or: How I Learned to Stop Worrying and Manage the Security Technical Debt Kalle Rindell (SINTEF Digital, Norway), Martin Gilje Jaatun (SINTEF Digital, Norway) and Karin Bernsmed (SINTEF Digital, Norway)</p> <p>Applying Security Testing Techniques to Automotive Engineering Irdin Pekaric (University of Innsbruck, Austria), Clemens Sauerwein (University of Innsbruck, Austria) and Michael Felderer (University of Innsbruck, Austria)</p> <p>Model Driven Security in a Mobile Banking Application Context Serafettin Senturk (Gebze Technical University, Turkey), Hasan Yasar (Software Engineering Institute, Carnegie Mellon University, United States) and Ibrahim Sogukpinar (Gebze Technical University, Turkey)</p> | <p>Preserving context security in AWS IoT Core Luca Calderoni (University of Bologna, Italy)</p> <p>DTE Access Control Model for Integrated ICS Systems Khaoula Es-Salhi (IMT atlantique - LabSTICC, France), David Espes (Université de Bretagne Occidentale (UBO), France) and Nora Cuppens (IMT atlantique - LabSTICC, France)</p> <p>Discussion</p> | <p>Assessing the Applicability of Authorship Verification Methods Oren Halvani (The Fraunhofer Institute for Secure Information Technology SIT, Germany), Christian Winter (The Fraunhofer Institute for Secure Information Technology SIT, Germany) and Lukas Graner (The Fraunhofer Institute for Secure Information Technology SIT, Germany)</p> <p>Improved Manipulation Detection with Convolutional Neural Network for JPEG Images Huajian Liu (Fraunhofer, Germany), Martin Steinebach (Fraunhofer, Germany) and Kathrin Schölei (Fraunhofer, Germany)</p> <p>Map My Murder! A Digital Forensic Study of Mobile Health and Fitness Applications Courtney Hassenfeldt (University of New Haven, United States), Shabana Baig (University of New Haven, United States), Ibrahim Baggili (University of New Haven, United States) and Xiaolu Zhang (University of Texas at San Antonio, United States)</p> <p>Deep Learning-based Facial Detection and Recognition in Still Images for Digital Forensics Patricia Domingues (ESTG – Leiria, Portugal) and Alexandre Frazão Rosário (IT, Portugal)</p> | <p>AIDA Framework: Real-Time Correlation and Prediction of Intrusion Detection Alerts Martin Husák (Masaryk University, Czechia) and Jaroslav Kašpar (Masaryk University, Czechia)</p> <p>Automated Pattern Inference Based on Repeatedly Observed Malware Artifacts Christian Doll (Fraunhofer, Germany), Arnold Sykosch (University of Bonn, Fraunhofer FKIE, Germany), Marc Ohm (University of Bonn, Germany) and Michael Meier (University of Bonn, Fraunhofer FKIE, Germany)</p> <p>A Quantitative Evaluation of Trust in the Quality of Cyber Threat Intelligence Sources Thomas Schaberreiter (University of Vienna, Austria), Veronika Kupfersberger (University of Vienna, Austria), Konstantinos Rantos (Technological Educational Institute of Eastern Macedonia and Thrace, Greece), Arnolnt Spyros (Innovative Secure Technologies, Greece), Christos Alexandros Papanikolaou (Innovative Secure Technologies, Greece), Christos Ilioudis (Alexander Technological Educational Institute of Thessaloniki, Greece) and Gerald Quirchmayr (University of Vienna, Austria)</p> | <p>Improving Borderline Adulthood Facial Age Estimation through Ensemble Learning Felix Anda (University College Dublin, Ireland), David Lillis (University College Dublin, Ireland), Aikaterini Kanta (University College Dublin, Ireland), Brett Becker (University College Dublin, Ireland), Elias Bou-Harb (Cyber Threat Intelligence Lab, Florida Atlantic University, United States), Nhien An Le Khac (University College Dublin, Ireland) and Mark Scanlon (University College Dublin, Ireland)</p> <p>Large-Scale Analysis of Pop-Up Scam on Typosquatting URLs Tobias Dam (FHSTP UAS, Austria), Lukas Daniel Klausner (FHSTP UAS, Austria), Damjan Buhov (Josef Ressel Center TARGET, Austria) and Sebastian Schrittwieser (SBA Research, Austria)</p> <p>Realistically Fingerprinting Social Media Webpages in HTTPS Traffic Mariano Di Martino (Hasselt University / Expertise Center For Digital Media, Belgium), Peter Quax (Hasselt University / Expertise Center For Digital Media, Belgium) and Wim Lamotte (Hasselt University / Expertise Center For Digital Media, Belgium)</p> | <p>Keynote: Security lifecycles for smart mobility and smart production Christoph Schmittner, AIT Austrian Institute of Technology GmbH, Austria</p> <p>Using Temporal and Topological Features for Intrusion Detection in Operational Networks Simon Duque Anton (Deutsches Forschungszentrum für Künstliche Intelligenz GmbH, Germany), Daniel Fraunholz (Deutsches Forschungszentrum für Künstliche Intelligenz GmbH, Germany) and Hans Dieter Schotten (Deutsches Forschungszentrum für Künstliche Intelligenz GmbH, Germany)</p> <p>Performance Evaluation of Elliptic-Curve Libraries on Automotive-Grade Microcontrollers Lucian Popa (Politehnica University of Timisoara, Romania), Bogdan Groza (Politehnica University of Timisoara, Romania) and Pal-Stefan Murvay (Politehnica University of Timisoara, Romania)</p> |
| 14:30 - 15:00 | Coffee Break | | | | | | | |

| | ARES Full VIII Network Security II Session Chair: Mathias Fischer, University of Hamburg, Germany | CD-MAKE VII Security & Privacy Session Chair: Edgar Weippl, SBA-Research, Austria | | | WSDF III Session Chair: Virginia Franqueira, University of Derby, UK | CyberTIM III Threat Intelligence Sharing Session Chair: TBA | IWCC III Session Chair: Wojciech Mazurczyk, Warsaw University of Technology, Poland | WISI II Session Chair: Stefan Jaksic, AIT Austrian Institute of Technology, Austria |
|---------------|---|--|--|--|--|---|--|---|
| 15:00 - 16:30 | <p>Detecting DGA domains with recurrent neural networks and side information Ryan Curtin (Symantec Corporation, United States), Andrew Gardner (Symantec Corporation, United States), Slawomir Grzonkowski (Symantec Corporation, Ireland), Alexey Klymenov (Symantec Corporation, Ireland) and Alejandro Mosquera Lopez (Symantec Corporation, United States)</p> <p>Black Box Attacks on Deep Anomaly Detectors Aditya Kuppa (Symantec Corporation and School of Computer Science University College, Dublin, Ireland), Slawomir Grzonkowski (Symantec Corporation, Ireland), Muhammad Rizwan Asghar (School of Computer Science The University of Auckland, New Zealand) and Nhien An Le Khac (School of Computer Science University College, Dublin, Ireland)</p> | <p>Knowledge Extraction for Cryptographic Algorithm Validation Test Vectors by Means of Combinatorial Coverage Measurement Dimitris E. Simos (SBA Research, Austria), Bernhard Garr (SBA Research, Austria), Ludwig Kampel (SBA Research, Austria), Rick Kuhn (National Institute of Standards and Technology, United States) and Raghu Kacker (National Institute of Standards and Technology, United States)</p> <p>An Evaluation of Fingerprinting Schemes and their Utility Effects on Machine Learning Tanja Sarcevic (SBA Research, Austria) and Rudolf Mayer (SBA Research, Austria)</p> <p>Differentially Private Obfuscation of Facial Images William Croft (Carleton University, Canada), Jorg-Rudiger Sack (Carleton University, Canada) and Wei Shi (Carleton University, Canada)</p> | | | <p>IO-Trust: An out-of-band trusted memory acquisition for intrusion detection and Forensics investigations in cloud IOMMU based systems Ahmad Atamli (Alan Turing Institute, University of Cambridge, United Kingdom), Giuseppe Petracca (The Pennsylvania State University, USA) and Jan Crowcroft (Alan Turing Institute, University of Cambridge, United Kingdom)</p> <p>A Study of Network Forensic Investigation in Docker Environments Daniel Spiekermann (FernUniversität in Hagen, Germany), Tobias Eggendorfer (HS Weingarten, Germany) and Jörg Keller (FernUniversität in Hagen, Germany)</p> <p>Revisiting Data Hiding Techniques for Apple File System Thomas Göbel (University of Applied Sciences Darmstadt, Germany), Jan Türr (University of Applied Sciences Darmstadt, Germany) and Harald Baier (University of Applied Sciences Darmstadt, Germany)</p> <p>IoT Ignorance is Digital Forensics Research Bliss: A Survey to Understand IoT Forensics Definitions, Challenges and Future Research Directions Tina Wu (University of Oxford, United Kingdom), Frank Breiting (University of New Haven, United States) and Ibrahim Baggili (University of New Haven, United States)</p> <p>Wrap-up Virginia Franqueira, University of Derby, UK</p> | <p>NERD: Network Entity Reputation Database, Václav Bartoš (CESNET, Czechia)</p> <p>Cyber Threat Information Sharing: Perceived Benefits and Barriers, Adam Zibak (University of Oxford, United Kingdom) and Andrew Simpson (University of Oxford, United Kingdom)</p> <p>Automated Cyber Threat Sensing and Responding: Integrating Threat Intelligence into Security-Policy-Controlled Systems, Peter Amthor (Technische Universität Ilmenau, Germany), Daniel Fischer (Technische Universität Ilmenau, Germany), Winfried Kühnhauser (Technische Universität Ilmenau, Germany) and Dirk Stelzer (Technische Universität Ilmenau, Germany)</p> <p>Closing of CyberTIM</p> | <p>Ontology of Metrics for Cyber Security Assessment Elena Doynikova (St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Russia), Andrey Fedorchenko (St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Russia) and Igor Kotenko (St. Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences, Russia)</p> <p>Fake News Detection by Image Montage Recognition Martin Steinebach (Fraunhofer, Germany), Huajian Liu (Fraunhofer, Germany) and Karol Gotkowski (Fraunhofer, Germany)</p> <p>HEHLKAPPE: Utilizing Deep Learning to Manipulate Surveillance Camera Footage in Real-Time Alexander Aigner (University of Applied Sciences Upper Austria, Austria) and Rene Zeller (University of Applied Sciences Upper Austria, Austria)</p> | <p>Applicability of the IEC 62443 standard in Industry 4.0 / IIoT Björn Leander (Mälardalen University & ABB, Sweden), Aida Causevic (Mälardalen University, Sweden) and Hans Hansson (Mälardalen University, Sweden)</p> <p>Requirements and Recommendations for IIoT Models to Automate Security Assurance through Threat Modelling, Security Analysis and Penetration Testing Ralph Ankele (JOANNEUM RESEARCH Forschungsgesellschaft mbH, Austria), Stefan Marksteiner (AVL List GmbH, Austria), Kai Nahrgang (JOANNEUM RESEARCH Forschungsgesellschaft mbH, Austria) and Heribert Vallant (JOANNEUM RESEARCH Forschungsgesellschaft mbH, Austria)</p> <p>Federated Identity Management and Interoperability for Heterogeneous Cloud Platform Ecosystems Nirajan Selvanathan (Salzburg Research, Austria), Dileepa Jayakody (Salzburg Research, Austria) and Violeta Damjanovic-Behrendt (Salzburg Research, Austria)</p> |
| 17:00 - 23:30 | <p>Conference Dinner Dover Visit Dover White Cliffs & Conference Dinner at Dover Town Hall Meeting point: 16:30 at the registration desk</p> | | | | | | | |
| | <p>After visiting the famous Dover White Cliffs with a gaze at Dover Castle, we will gather in the stone hall for an aperitif. The hall is complete with flags and banners of the Cinque Ports, arms and armour and portraits of former dignitaries of Dover. The official Conference Dinner will be held in the Connaught Hall, which was originally opened in 1880's as a concert and meeting hall very much Victorian with pillars and balconies and a magnificent dance floor.</p> | | | | | | | |

Detailed Program Thursday 29.08.2019

| Time | Track 1 LH B (LT 1) | Track 2 LH C (LT 2) | Track 3 LH D (SR 2) | Track 4 LH E (SR 1) |
|---------------|---|--|------------------------|--|
| 09:00 - 15:00 | Registration | | | |
| 09:30 - 11:00 | ARES Short II Threat detection and response Session Chair: Abdelmalek Benzekri, University of Toulouse, France | CD-MAKE VIII Learning III Session Chair: Epaminondas Kapetanios, Cognitive Computing, University of Westminster, London, UK | | BASS I Privacy, Authentication, and Access Control Session Chair: Peter Kieseberg, FH St. Pölten, Austria |
| | STAMAD – a STATIC Malware Detector <i>Khanh Huu The Dam (Nha Trang University, Viet Nam) and Tayssir Touili (LIPN, CNRS & University Paris 13, France)</i> | Insights into Learning Competence through Probabilistic Graphical Models <i>Anna Saranti (Graz University of Technology, Austria), Behnam Taraghi (Graz University of Technology, Austria), Martin Ebner (Graz University of Technology, Austria) and Andreas Holzinger (Graz University of Technology, Austria)</i> | | Privacy-Enhancing Context Authentication from Location-Sensitive Data <i>Pradip Mainali (OneSpan, Belgium), Carlton Shepherd (OneSpan, United Kingdom), and Fabien A. P. Petitcolas (OneSpan, Belgium),</i> |
| | Enhancing credibility of digital evidence through provenance-based incident response handling <i>Ludwig Enlbrecht (University of Regensburg, Germany), Gregor Langner (University of Vienna, Austria), Günther Pernul (University of Regensburg, Germany) and Gerald Quirchmayr (University of Vienna, Austria)</i> | Sparse Nerves in Practice <i>Nello Blaser (University of Bergen, Norway) and Marten Brun (University of Bergen, Norway)</i> | | Semantic Mediation for A Posteriori Log Analysis <i>Farah Dernaika (IMT Atlantique, France), Nora Cuppens-Bouahia (IMT Atlantique, France), Frédéric Cuppens (IMT Atlantique, France) and Olivier Raynaud (LIMOS, France)</i> |
| | Language-based Integration of Digital Forensics & Incident Response <i>Christopher Stelly (University of New Orleans, United States) and Vassil Roussev (University of New Orleans, United States)</i> | Backdoor Attacks in Neural Networks – a Systematic Evaluation on Multiple Traffic Sign Datasets <i>Rudolf Mayer (SBA Research, Austria) and Andreas Ekelhart (Secure Business Austria, Austria)</i> | | Alexa's Voice Recording Behavior: A Survey of User Understanding and Awareness <i>Yusra Javed (Illinois State University, United States), Shashank Sethi (Illinois State University, United States) and Akshay Jadoun (Illinois State University, United States)</i> |
| 11:00 - 11:30 | Coffee Break | | | |
| 11:30 - 12:30 | CD-MAKE Keynote Session Chair: Peter Kieseberg, FH St. Pölten, Austria LH A (LT 3) | | | |
| | Keynote: Crossing the chasm: from Academia to Industry <i>Janet Bastiman, Venture Partner at MMC Ventures and Chief Science Officer at StoryStream</i> | | | |
| 12:30 - 13:30 | Lunch | | | MAKE Journal Editorial Meeting LH C (LT2) |

| | ARES Short III Security Solutions Session Chair: Budi Arief, University of Kent, UK | CD-MAKE IX Learning IX Session Chair: Vasile Palade, Coventry University, UK | iPAT Panel Session Privacy and Trust with Publicly Available Data Session Chair: Jörg Daubert, Philipps University of Marburg, Germany | BASS II Communication networks Session Chair: Andrea Saracino, IIT-CNR, Italy |
|----------------------|---|--|---|--|
| 13:30 - 15:00 | <p>Post-Quantum UC-Secure Oblivious Transfer in the Standard Model with Adaptive Corruptions <i>Olivier Blazy (Université de Limoges, France), Céline Chevalier (ENS, France) and Quoc Huy Vu (DIENS, École normale supérieure, CNRS, INRIA, PSL University, Paris, France)</i></p> <p>On the Utility of Synthetic Data: An Empirical Evaluation on Machine Learning <i>Markus Hittmeir (SBA Research, Austria), Andreas Ekelhart (SBA Research, Austria) and Rudolf Mayer (SBA Research, Austria)</i></p> <p>Building Taxonomies based on Human-Machine Teaming: Cyber Security as an Example <i>Mohamad Imad Mahaini (The University of Kent, United Kingdom), Shujun Li (The University of Kent, United Kingdom) and Rahime Belen Sağlam (Ankara Yıldırım Beyazıt University, Turkey)</i></p> | <p>Deep Learning for Proteomics Data for Feature Selection and Classification <i>Sahar Iravani (Zuse Institute Berlin, Germany) and Tim O.F. Conrad (Freie Universität Berlin, Germany)</i></p> <p>Package and Classify Wireless Product Features to Their Sales Items and Categories Automatically <i>Haitao Tang (Nokia, Finland) and Pauliina Eratuuli (Nokia, Finland)</i></p> <p>Temporal diagnosis of discrete-event systems with dual knowledge compilation <i>Nicola Bertoglio (University of Brescia, Italy), Gianfranco Lamperti (University of Brescia, Italy) and Marina Zanella (University of Brescia, Italy)</i></p> | <p>Privacy & Trust-related websites and data sources <i>Jörg Daubert, Philipps University of Marburg, Germany</i></p> <p>Trust: CAIQ-related Websites <i>Sheikh M. Habib, Continental AG, Germany</i></p> <p>The politicization of personal data <i>Stephen Marsh, University of Ontario, Canada</i></p> | <p>Invited Talk: Authentication of the future - a challenge to privacy? <i>Peter Kieseberg, FH St.Pölten, Austria</i></p> <p>Adversarial Communication Networks Modeling for Intrusion Detection Strengthened against Mimicry <i>Jorge Maestre Vidal (Indra, Digital Lab, Spain) and Marco Antonio Sotelo Monge (Universidad Complutense de Madrid, Spain)</i></p> |
| 15:00 - 15:15 | short Coffe Break | | | |