2016 European Intelligence and Security Informatics Conference

- Message from the General Chairs
- Message from the Program Chairs
- Organization
- Program Committee
- Title Page (Book version)
- Copyright Page (Book version)
- Table of Contents (Book version)
- Author Index (Book version)
- Publisher's Information (Book version)
Sessions

- Long Papers
- Short Papers
- Poster Papers
Quality Assurance for Security Applications of Big Data  
Roger Clarke

On Interoperability of Security Document Reading Devices  
Svorad Štolc, Peter Wild, Kristián Valentín, Franz Daubner, and Markus Clabian

Location, Location, Location: Mapping Potential Canadian Targets in Online Hacker Discussion Forums  
Richard Frank, Mitch Macdonald, and Bryan Monk

The Role of Internet Service Providers in Botnet Mitigation  
Jeroen Pijpker and Harald Vranken

Risk Kit: Highlighting Vulnerable Identity Assets for Specific Age Groups  
Razieh Nokhbeh Zaeem, Monisha Manoharan, and K. Suzanne Barber

How to Support the Decision Making in Crisis Context?  
Bénédicte Goujon

Providing Extensibility to Threat Modelling in Cloud-COVER’s Underlying Analysis Model  
Mustafa Aydin and Jeremy Jacob
Methodology and Tool to Facilitate Structured Analysis of Multiple Hypotheses
*Magdalena Granåsen and Maja Karasalo*

Towards Designing a Multipurpose Cybercrime Intelligence Framework
*Mariam Nouh, Jason R. C. Nurse, and Michael Goldsmith*

How Analysts Think: Think-steps as a Tool for Structuring Sensemaking in Criminal Intelligence Analysis
*Nallini Selvaraj, Simon Attfield, Peter Passmore, and B. L. William Wong*
Short Papers

- Compression Effects on Security Document Images
  *Peter Wild, Svorad Štolc, Kristián Valentín, Franz Daubner, and Markus Clabian*

- Cards, Money and Two Hacking Forums: An Analysis of Online Money Laundering Schemes
  *Alexander Mikhaylov and Richard Frank*

- The Effectiveness of Counter-terrorism Policies Based on the Terrorism Decision
  *Chaomin Ou and Wenyao Yang*

- Information Security Aspects of the Public Safety Data Interoperability Network
  *Blaż Ivanc and Borka Jerman Blažič*

- Filtering Estimated Crime Series Based on Route Calculations on Spatio-temporal Data
  *Martin Boldt and Jaswanth Bala*

- Disaster Risk Reduction for International Residents in Japan: Barriers and Facilitators to Knowledge Sharing in Times of Disaster
  *Jiro Usugami*
Discovering Knowledge in Online Drug Transactions Using Conceptual Graphs and Formal Concept Analysis
   Constantinos Orphanides, Babak Akhgar, and Petra Saskia Bayerl

Sentiment-based Classification of Radical Text on the Web
   Ryan Scrivens and Richard Frank

My Name is Legion: Estimating Author Counts Based on Stylistic Diversity
   Johanna Björklund and Niklas Zechner

Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures
   Ilias Gialampoukidis, George Kalpakis, Theodora Tsikrika, Stefanos Vrochidis, and Ioannis Kompatsiaris

Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution
   Michele Fiorini, Vincenzo Esposito, Marcello Cinque, Christian Esposito, Mario Fiorentino, Domenico Cotroneo, and Stefano Russo

QUIN: Providing Integrated Analysis Support to Crime Investigators
   Selmar Smit, Bob van der Vecht, Freek van Wermeskerken, and Jan Willem Streefkerk

But I did not Mean It!—Intent Classification of Racist Posts on Tumblr
   Swati Agarwal and Ashish Sureka
Missing Solutions in the Fight against Cybercrime and Cyberterrorism—The New EU Research Agenda  
_Borka Jerman Blažič and Tomaž Klobučar_

How Analysts Think: Decision Making in the Absence of Clear Facts  
_Matylda Gerber, B. L. William Wong, and Neesha Kodagoda_

Personal Information Leakage During Password Recovery of Internet Services  
_Mordechai Guri, Eyal Shemer, Dov Shitz, and Yuval Elovici_

Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks  
_Patrick Seidler, Johanna Haider, Neesha Kodagoda, B. L. William Wong, Margit Pohl, and Richard Adderley_

A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet  
_Jukka Ruohonen, Sanja Šćepanović, Sami Hyrynsalmi, Igor Mishkovski, Tuomas Aura, and Ville Leppänen_

A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment  
_Alexander Nussbaumer, Katrien Verbert, Eva-Catherine Hillemann, Michael A. Bedek, and Dietrich Albert_
- Critical Review of Analytic Techniques
  Mandeep K. Dhami, Ian K. Belton, and Kathryn E. Careless

- Modified Graphstega Based on Chart Scale Modification
  Apianti Nanda Sari and Ari Moesriami Barmawi

- A Security Analysis on Apple Pay
  Ashay S. Jawale and Joon S. Park

- Enhancing Risk-Based Decisions by Leveraging Cyber Security Automation
  Tina AlSadhan and Joon S. Park

- Text Authorship Verification through Watermarking
  Stefano Giovanni Rizzo, Flavio Bertini, and Danilo Montesi

- On Privacy and Security Challenges in Smart Connected Homes
  Joseph Bugeja, Andreas Jacobsson, and Paul Davidsson

- An Argumentative-Narrative Risk Assessment Model
  Floris Bex and Bas Hovestad

- A Quantitative Approach to Risk and Cost Assessment in Supply Chain Management
  Linus Gisслén and Andreas Horndahl
A Behavioral Biometrics User Authentication Study Using Motion Data from Android Smartphones
  Javid Maghsoudi and Charles C. Tappert

Random Delays to Limit Timing Covert Channel
  Anna Belozubova, Anna Epishkina, and Konstantin Kogos

A Framework and Prototype for A Socio-Technical Security Information and Event Management System (ST-SIEM)
  Bilal AlSabbagh and Stewart Kowalski
Poster Papers

- Forecasting the Underlying Psychological Forces to Political Violence through Big Data Symbol Mining
  Niklas Hageback

- Role of Author Personality Traits for Identifying Intent Based Racist Posts
  Swati Agarwal and Ashish Sureka

- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications
  George Leventakis, George Papalexandratos, George Kokkinis, Elisavet Charalambous, and Nikolaos Koutras

- Multilayer Analysis of Online Illicit Marketplaces
  Michael Ashcroft, Matteo Magnani, Davide Vega, Danilo Montesi, and Luca Rossi

- The IPATCH System for Maritime Surveillance and Piracy Threat Classification
  Maria Andersson, Ronnie Johansson, Karl-Göran Stenborg, Robert Forsgren, Thomas Cane, Grzegorz Taberski, Luis Patino, and James Ferryman

- Present Status and Challenges in Cloud Monitoring Framework: A Survey
  Aws Naser, Mohamed Fadli Zolkli, Shahid Anwar, and Muna Sulieman Al-Hawawreh

- A Dedicated Crawling Engine to Reduce Apps Distribution Risks
  Marc Michel Pic
Harnessing Crowds to Avert or Mitigate Acts Terrorism: A Collective Intelligence Call for Action

Haibo Li and Anders Hedman
Papers by Author

A
- Adderley, Richard
- Agarwal, Swati
- Akhgar, Babak
- Albert, Dietrich
- Al-Hawawreh, Muna Sulieman
- AlSabbagh, Bilal
- AlSadhan, Tina
- Andersson, Maria
- Anwar, Shahid
- Ashcroft, Michael
- Attfield, Simon
- Aura, Tuomas
- Aydin, Mustafa

B
- Bala, Jaswanth
- Barber, K. Suzanne
- Barmawi, Ari Moesriami
- Bayerl, Petra Saskia
- Bedek, Michael A.
- Belozubova, Anna
- Belton, Ian K.
- Bertini, Flavio
- Bex, Floris
- Björklund, Johanna
- Boldt, Martin
- Bugeja, Joseph

C
- Cane, Thomas
Papers by Author

- Verbert, Katrien
- Vranken, Harald
- Vrochidis, Stefanos

W
- Wild, Peter
- Wong, B. L. William

Y
- Yang, Wenyao

Z
- Zaeem, Razieh Nokhbeh
- Zechner, Niklas
- Zolkipli, Mohamed Fadli
Adderley, Richard
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks

Agarwal, Swati
- But I did not Mean It!—Intent Classification of Racist Posts on Tumblr
- Role of Author Personality Traits for Identifying Intent Based Racist Posts

Akhgar, Babak
- Discovering Knowledge in Online Drug Transactions Using Conceptual Graphs and Formal Concept Analysis

Albert, Dietrich
- A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment
Al-Hawawreh, Muna Sulieman
- Present Status and Challenges in Cloud Monitoring Framework: A Survey

AlSabbagh, Bilal
- A Framework and Prototype for A Socio-Technical Security Information and Event Management System (ST-SIEM)

AlSadhan, Tina
- Enhancing Risk-Based Decisions by Leveraging Cyber Security Automation

Andersson, Maria
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Anwar, Shahid
- Present Status and Challenges in Cloud Monitoring Framework: A Survey
Papers by Author

Ashcroft, Michael
- Multilayer Analysis of Online Illicit Marketplaces

Attfield, Simon
- How Analysts Think: Think-steps as a Tool for Structuring Sensemaking in Criminal Intelligence Analysis

Aura, Tuomas
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet

Aydin, Mustafa
- Providing Extensibility to Threat Modelling in Cloud-COVER's Underlying Analysis Model
Bala, Jaswanth
- Filtering Estimated Crime Series Based on Route Calculations on Spatio-temporal Data

Barber, K. Suzanne
- Risk Kit: Highlighting Vulnerable Identity Assets for Specific Age Groups

Barmawi, Ari Moesriami
- Modified Graphstega Based on Chart Scale Modification

Bayerl, Petra Saskia
- Discovering Knowledge in Online Drug Transactions Using Conceptual Graphs and Formal Concept Analysis
Bedek, Michael A.
- A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment

Belozubova, Anna
- Random Delays to Limit Timing Covert Channel

Belton, Ian K.
- Critical Review of Analytic Techniques

Bertini, Flavio
- Text Authorship Verification through Watermarking

Bex, Floris
- An Argumentative-Narrative Risk Assessment Model
Björklund, Johanna
- My Name is Legion: Estimating Author Counts Based on Stylistic Diversity

Boldt, Martin
- Filtering Estimated Crime Series Based on Route Calculations on Spatio-temporal Data

Bugeja, Joseph
- On Privacy and Security Challenges in Smart Connected Homes

Cane, Thomas
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Careless, Kathryn E.
- Critical Review of Analytic Techniques
Charalambous, Elisavet
- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications

Cinque, Marcello
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Clabian, Markus
- On Interoperability of Security Document Reading Devices
- Compression Effects on Security Document Images

Clarke, Roger
- Quality Assurance for Security Applications of Big Data
Cotroneo, Domenico
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Daubner, Franz
- On Interoperability of Security Document Reading Devices
- Compression Effects on Security Document Images

Davidsson, Paul
- On Privacy and Security Challenges in Smart Connected Homes

Dhami, Mandeep K.
- Critical Review of Analytic Techniques

Elovici, Yuval
- Personal Information Leakage During Password Recovery of Internet Services
Epishkina, Anna
- Random Delays to Limit Timing Covert Channel

Esposito, Christian
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Esposito, Vincenzo
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Ferryman, James
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification
Fiorentino, Mario
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Fiorini, Michele
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Forsgren, Robert
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Frank, Richard
- Location, Location, Location: Mapping Potential Canadian Targets in Online Hacker Discussion Forums
- Cards, Money and Two Hacking Forums: An Analysis of Online Money Laundering Schemes
- Sentiment-based Classification of Radical Text on the Web
Gerber, Matylda

- How Analysts Think: Decision Making in the Absence of Clear Facts

Gialampoukidis, Ilias

- Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures

Gisslén, Linus

- A Quantitative Approach to Risk and Cost Assessment in Supply Chain Management

Goldsmith, Michael

- Towards Designing a Multipurpose Cybercrime Intelligence Framework

Goujon, Bénédicte

- How to Support the Decision Making in Crisis Context?
Granåsen, Magdalena
- Methodology and Tool to Facilitate Structured Analysis of Multiple Hypotheses

Guri, Mordechai
- Personal Information Leakage During Password Recovery of Internet Services

Hageback, Niklas
- Forecasting the Underlying Psychological Forces to Political Violence through Big Data Symbol Mining

Haider, Johanna
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks
Hedman, Anders
- Harnessing Crowds to Avert or Mitigate Acts Terrorism: A Collective Intelligence Call for Action

Hillemann, Eva-Catherine
- A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment

Horndahl, Andreas
- A Quantitative Approach to Risk and Cost Assessment in Supply Chain Management

Hovestad, Bas
- An Argumentative-Narrative Risk Assessment Model
Hyrynsalmi, Sami
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet

Ivanc, Blaž
- Information Security Aspects of the Public Safety Data Interoperability Network

Jacob, Jeremy
- Providing Extensibility to Threat Modelling in Cloud-COVER’s Underlying Analysis Model

Jacobsson, Andreas
- On Privacy and Security Challenges in Smart Connected Homes

Jawale, Ashay S.
- A Security Analysis on Apple Pay
Jerman Blažič, Borka

- Information Security Aspects of the Public Safety Data Interoperability Network
- Missing Solutions in the Fight against Cybercrime and Cyberterrorism—The New EU Research Agenda

Johansson, Ronnie

- The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Kalpakis, George

- Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures

Karasalo, Maja

- Methodology and Tool to Facilitate Structured Analysis of Multiple Hypotheses
Klobučar, Tomaž
- Missing Solutions in the Fight against Cybercrime and Cyberterrorism—The New EU Research Agenda

Kodagoda, Neesha
- How Analysts Think: Decision Making in the Absence of Clear Facts
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks

Kogos, Konstantin
- Random Delays to Limit Timing Covert Channel

Kokkinis, George
- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications
Kompatsiaris, Ioannis
- Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures

Koutras, Nikolaos
- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications

Kowalski, Stewart
- A Framework and Prototype for A Socio-Technical Security Information and Event Management System (ST-SIEM)

Leppänen, Ville
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet
Leventakis, George

- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications

Li, Haibo

- Harnessing Crowds to Avert or Mitigate Acts Terrorism: A Collective Intelligence Call for Action

Macdonald, Mitch

- Location, Location, Location: Mapping Potential Canadian Targets in Online Hacker Discussion Forums

Maghsoudi, Javid

- A Behavioral Biometrics User Authentication Study Using Motion Data from Android Smartphones
Magnani, Matteo
- Multilayer Analysis of Online Illicit Marketplaces

Manoharan, Monisha
- Risk Kit: Highlighting Vulnerable Identity Assets for Specific Age Groups

Mikhaylov, Alexander
- Cards, Money and Two Hacking Forums: An Analysis of Online Money Laundering Schemes

Mishkovski, Igor
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet
Monk, Bryan
- Location, Location, Location: Mapping Potential Canadian Targets in Online Hacker Discussion Forums

Montesi, Danilo
- Text Authorship Verification through Watermarking
- Multilayer Analysis of Online Illicit Marketplaces

Naser, Aws
- Present Status and Challenges in Cloud Monitoring Framework: A Survey

Nouh, Mariam
- Towards Designing a Multipurpose Cybercrime Intelligence Framework

Nurse, Jason R. C.
- Towards Designing a Multipurpose Cybercrime Intelligence Framework
Nussbaumer, Alexander
- A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment

Orphanides, Constantinos
- Discovering Knowledge in Online Drug Transactions Using Conceptual Graphs and Formal Concept Analysis

Ou, Chaomin
- The Effectiveness of Counter-terrorism Policies Based on the Terrorism Decision

Papalexandratos, George
- Towards Efficient Law Enforcement Decision Support Systems in the Area of Community Policing: The Use of Mobile Applications

Park, Joon S.
- A Security Analysis on Apple Pay
Enhancing Risk-Based Decisions by Leveraging Cyber Security Automation

Passmore, Peter

How Analysts Think: Think-steps as a Tool for Structuring Sensemaking in Criminal Intelligence Analysis

Patino, Luis

The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Pic, Marc Michel

A Dedicated Crawling Engine to Reduce Apps Distribution Risks

Pijpker, Jeroen

The Role of Internet Service Providers in Botnet Mitigation
Pohls, Margit
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks

Rizzo, Stefano Giovanni
- Text Authorship Verification through Watermarking

Rossi, Luca
- Multilayer Analysis of Online Illicit Marketplaces

Ruohonen, Jukka
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet
Russo, Stefano
- Confidential Crisis Information Sharing through an Interoperability Framework among First Responders: A Discussion and a Preliminary Solution

Sari, Aprianti Nanda
- Modified Graphstega Based on Chart Scale Modification

Šćepanović, Sanja
- A Post-Mortem Empirical Investigation of the Popularity and Distribution of Malware Files in the Contemporary Web-Facing Internet

Scrivens, Ryan
- Sentiment-based Classification of Radical Text on the Web
Seidler, Patrick
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks

Selvaraj, Nallini
- How Analysts Think: Think-steps as a Tool for Structuring Sensemaking in Criminal Intelligence Analysis

Shemer, Eyal
- Personal Information Leakage During Password Recovery of Internet Services

Shirtz, Dov
- Personal Information Leakage During Password Recovery of Internet Services

Smit, Selmar
- QUIN: Providing Integrated Analysis Support to Crime Investigators
Stenborg, Karl-Göran
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification

Štolc, Svorad
- On Interoperability of Security Document Reading Devices
- Compression Effects on Security Document Images

Streefkerk, Jan Willem
- QUIN: Providing Integrated Analysis Support to Crime Investigators

Sureka, Ashish
- But I did not Mean It!—Intent Classification of Racist Posts on Tumblr
- Role of Author Personality Traits for Identifying Intent Based Racist Posts

Taberski, Grzegorz
- The IPATCH System for Maritime Surveillance and Piracy Threat Classification
Tappert, Charles C.
- A Behavioral Biometrics User Authentication Study Using Motion Data from Android Smartphones

Tsikrika, Theodora
- Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures

Usugami, Jiro
- Disaster Risk Reduction for International Residents in Japan: Barriers and Facilitators to Knowledge Sharing in Times of Disaster

Valentín, Kristián
- On Interoperability of Security Document Reading Devices
- Compression Effects on Security Document Images
van der Vecht, Bob
- QUIN: Providing Integrated Analysis Support to Crime Investigators

van Wermeskerken, Freek
- QUIN: Providing Integrated Analysis Support to Crime Investigators

Vega, Davide
- Multilayer Analysis of Online Illicit Marketplaces

Verbert, Katrien
- A Framework for Cognitive Bias Detection and Feedback in a Visual Analytics Environment

Vranken, Harald
- The Role of Internet Service Providers in Botnet Mitigation
Vrochidis, Stefanos
- Key Player Identification in Terrorism-Related Social Media Networks Using Centrality Measures

Wild, Peter
- On Interoperability of Security Document Reading Devices
- Compression Effects on Security Document Images

Wong, B. L. William
- How Analysts Think: Think-steps as a Tool for Structuring Sensemaking in Criminal Intelligence Analysis
- How Analysts Think: Decision Making in the Absence of Clear Facts
- Design for Intelligence Analysis of Complex Systems: Evolution of Criminal Networks

Yang, Wenyao
- The Effectiveness of Counter-terrorism Policies Based on the Terrorism Decision
Zaeem, Razieh Nokhbeh
- Risk Kit: Highlighting Vulnerable Identity Assets for Specific Age Groups

Zechner, Niklas
- My Name is Legion: Estimating Author Counts Based on Stylistic Diversity

Zolkipli, Mohamed Fadli
- Present Status and Challenges in Cloud Monitoring Framework: A Survey