

## Publikationen

Martin Schramm, D. Fiala, Laurin Dörr, Michael Heigl (2019): On the Energy Consumption of Quantum-resistant Cryptographic Software Implementations Suitable for Wireless Sensor Networks. In: Proceedings of the 16th International Joint Conference on e-Business and Telecommunications (July 26-28, 2019; Prague, Czech Republic), vol. Vol. 2 (SECRYPT 2019 : 16th International Conference on Security and Cryptography). DOI: 10.5220/0007835600720083.

Martin Schramm, D. Fiala, Laurin Dörr, Michael Heigl (2019): Comparison of Energy-Efficient Key Management Protocols for Wireless Sensor Networks. In: Proceedings of the 2019 International Electronics Communication Conference (IECC '19) [July 7-9, 2019; Okinawa, Japan]. DOI: 10.1145/3343147.3343156.

Andreas Grzemba, Karl Leidl (2019): Secure per Machine Learning - Wie KI die Informationssicherheit verbessern kann. In: Computer & Automation (Sonderheft Safety & Security), no. Juni.

Andreas Grzemba, Karl Leidl (2019): Cybersicherheit in industriellen Netzwerken - Intrusion Detection mit Machine Learning. In: Digitaler Tagungsband zum Forum Safety & Security (8.- 10. Juli 2019, Sindelfingen).

Martin Schramm, Karl Leidl, Robert Wildenauer (2019): Hacking an optics manufacturing machine: You don't see it coming?!. In: Proceedings of SPIE 11171 (Sixth European Seminar on Precision Optics Manufacturing, 1117101 [April 9th-10th 2019, Teisnach]), Bellingham, WA, USA. DOI: 10.1117/12.2526691.

Martin Schramm, D. Fiala, Michael Heigl (2019): A Lightweight Quantum-Safe Security Concept for Wireless Sensor Network Communication. In: Proceedings of the IEEE Annual International Conference on Pervasive Computing and Communications Workshops (March 11-15, 2019; Kyoto, Japan). DOI: 10.1109/PERCOMW.2019.8730749.

Nicolas Tiefnig, Martin Schramm, D. Fiala, Laurin Dörr, Michael Heigl (2019): A Resource-Preserving Self-Regulating Uncoupled MAC Algorithm to be Applied in Incident Detection. In: Computers & Security, vol. 85, no. August, pp. 270-285. DOI: 10.1016/j.cose.2019.05.010.

Martin Schramm, R. Dojen, Michael Heigl (2018): A Vendor-Neutral Unified Core for Cryptographic Operations in GF(p) and GF(2<sup>m</sup>) Based on Montgomery Arithmetic (Article ID 4983404). In: Security and Communication Networks, no. 9, pp. 1-18. DOI: 10.1155/2018/4983404.

Martin Schramm, D. Fiala, Amar Almaini, Laurin Dörr, Michael Heigl (2018): Incident Reaction Based on Intrusion Detections' Alert Analysis. In: Proceedings of the 23rd International Conference on Applied Electronics (AE) 2018 (University of West Bohemia, Pilsen, Czech Republic; September 11-12, 2018). DOI: 10.23919/AE.2018.8501419.

Peter Semmelbauer (2017): Industrial-Ethernet-Protokolle: Sicherheitsrisiko Layer-2-Switch (Reprint). In: Bavarian Journal of Applied Sciences, vol. 3, no. 1, pp. 277-281.

Peter Semmelbauer (2017): Integriertes Sicherheitskonzept zum Schutz von Gebäudeautomationssystemen in kritischer Infrastruktur. In: Tagungsband zum VDI-Kongress AUTOMATION 2017 (27.-28.06.2017; Baden-Baden).

Karl Leidl, Robert Hable, Michael Fernandes, Nari Arunraj, Michael Heigl (2017): Comparison of Supervised, Semi-supervised and Unsupervised Learning Methods in Network Intrusion Detection Systems (NIDS) Application. In: Anwendungen und Konzepte in der Wirtschaftsinformatik (AKWI), no. 6, pp. 10-19.

Martin Schramm, R. Dojen, Michael Heigl (2017): Experimental assessment of FIRO- and GARO-based noise sources for digital TRNG designs on FPGAs. In: Proceedings of the 22nd International Conference on Applied Electronics (AE 2017) [Sep 5-7, 2017; University of West Bohemia, Pilsen, Czech Republic]. DOI: 10.23919/AE.2017.8053618.

Martin Schramm, D. Fiala, Laurin Dörr, Michael Heigl (2017): Assessment simulation model for uncoupled message authentication. In: Proceedings of the 22nd International Conference on Applied Electronics (AE 2017) [Sep 5-7, 2017;University of West Bohemia, Pilsen, Czech Republic]. DOI: 10.23919/AE.2017.8053580.

Peter Semmelbauer (2017): Industrial-Ethernet-Protokolle: Sicherheitsrisiko Layer-2-Switch. In: Industrie 4.0-Magazin - Zeitschrift für die vierte industrielle Revolution, no. 1.

Peter Semmelbauer (2017): Sicherheitsrisiko Layer-2-Switch. In: Industrial Communication Journal - Ethernet - Wireless - Security (Sonderbeilage des SPS-Magazins), no. 1.

Andreas Grzemba, Martin Schramm, Laurin Dörr, Michael Heigl (2016): Embedded Plug-In Devices to Secure Industrial Network Communications. In: IEEE Proceedings of the 21st International Conference on Applied Electronics (Sept 6-7 2016, Pilsen, Czech Republic).

Andreas Fuchs, Andreas Grzemba, Martin Aman, Michael Heigl (2016): Industrial Legacy System Communication Through Interconnected Embedded Plug-In Devices. In: Applied Research Conference 2016.

Andreas Grzemba, S. Plaga, Laurin Dörr (2012): Modification of the Standard Linux Scheduler for Power Monitoring. In: Embedded World Exhibition & Conference, Nürnberg.

Andreas Grzemba, Martin Schramm, Karl Leidl (2012): The Establishment of High Degrees of Trust in a Linux Environment. In: Embedded World International Conference 2012, Nürnberg.

Andreas Grzemba, Martin Schramm, et al. (2011): Utilizing a State-of-the-art Trust Anchor in Order to Increase the Trustworthiness of Embedded Platforms. In: Embedded World International Conference 2011, Nürnberg.

Andreas Grzemba, Martin Schramm (2011): Trustworthy Building Blocks for a More Secure Embedded Computing Environment. In: Applied Electronics International Conference, Pilsen, Tschechische Republik.

Andreas Grzemba, Martin Schramm (2010): The Benefits of Combining Trusted Computing with Virtualization Techniques. In: Applied Electronics International Conference, Pilsen, Tschechische Republik.

Karl Leidl: Anomalieerkennung in industriellen Netzwerken - Cybersicherheit mit Machine Learning. In: Forum Künstliche Intelligenz, Stuttgart.

Karl Leidl: Cybersicherheit in industriellen Netzwerken - Intrusion Detection mit Machine Learning. In: Forum Safety & Security, Sindelfingen.

Amar Almaini: Authentication and port scan mitigation in the Software Defined Network Switches. Posterpräsentation. In: 6. Tag der Forschung, Deggendorf.

Fabian Sauer: Evaluationsframework für Intrusion Detection System (IDS). Vortrag und Posterpräsentation. In: 6. Tag der Forschung, Deggendorf.

Andreas Grzemba: Entwicklungstrends in der Car IT Security.

Martin Schramm: A Practical Introduction to Cryptographic Engineering. [Invited Talk; eingeladen von Dalibor Fiala (PhD)].

Michael Heigl: DecADe - Decentralized Anomaly Detection. Posterpräsentation. In: 5. Tag der Forschung, Deggendorf.

Peter Semmelbauer, Andreas Grzemba, M. Lemmer: Integriertes Sicherheitskonzept zum Schutz von Gebäudeautomationssystemen in kritischer Infrastruktur. In: Automation 2017 - Technology Networks Processes, Baden-Baden.

Andreas Grzemba, Christian Boiger, Laurin Dörr, Michael Heigl: IT-Security-Architektur für Next-Generation Kommunikationssysteme im Automobil. In: 32. VDI/VW-Gemeinschaftstagung: Fahrerassistenzsysteme und automatisiertes Fahren, Wolfsburg.



Andreas Grzemba, Martin Aman, Karl Leidl, Michael Heigl: Intrusion Detection Sensoren für industrielle Netzwerke. In: CYBICS - Cyber Security for Industrial Control Systems (Workshop & Konferenz für IT-Sicherheit in der Industrie), Würzburg.

Peter Semmelbauer, Andreas Grzemba, Martin Aman, Karl Leidl, Laurin Dörr: Schwachstellen, Angriffsszenarien und Schutzmaßnahmen bei industriellen Protokollen am Beispiel Profinet IO. In: Automation 2016 - Secure & reliable in the digital world, Baden-Baden.

Karl Leidl: Cyber Security for Process Control Networks. In: 1st European Seminar on Precision Optics Manufacturing, Teisnach.

Martin Schramm: Embedded Trusted Computing on ARM-based Systems. In: Security Forum 2014, Hagenberg im Mühlkreis, Österreich.

Martin Schramm: Resilience in Embedded Industrial Networks. In: Trusted Computing Group Members Meeting 2014, Barcelona, Spanien.

Andreas Grzemba, Martin Schramm: The Benefits of Combining Trusted Computing with Virtualization Techniques. In: IEEE International Conference on Applied Electronics 2010, Pilsen, Tschechische Republik.

Andreas Grzemba, Peter Fröhlich, Laurin Dörr: Industrial Security Workshop. In: Embedded World Conference 2014, Nürnberg.

Andreas Grzemba, Martin Schramm: Trusted Computing Concepts for Resilient Embedded Networks. International Workshop on Engineering Cyber Security and Resilience. In: 2014 ASE Bigdata/SocialCom/Cybersecurity Conference, Stanford, CA, USA.

Andreas Grzemba, Martin Schramm: Reconfigurable Trust for Embedded Computing Platforms. In: IEEE Applied Electronics International Conference, Pilsen, Tschechische Republik.

Andreas Grzemba, Karl Leidl, Laurin Dörr: Live Hacking. In: it-sa, Nürnberg.

Karl Leidl: Cyber Security for Industrial Control Systems. In: IHS Industrial Automation Conference, Wien, Österreich.

Andreas Grzemba, Peter Fröhlich, Karl Leidl: Embedded Security with Respect to Industrial Control Systems. Workshop. In: Embedded World Conference 2013, Nürnberg.

Andreas Grzemba, Martin Schramm, Karl Leidl, N. Kuntze: Enhanced Embedded Device Security by Combining Hardware-Based Trust Mechanisms. Poster-Session. In: ACM Conference on Computer and Communications Security, Berlin.

Andreas Grzemba, Martin Schramm: On the Implementation of an Efficient Multiplier Logic for FPGA-based Cryptographic Applications. In: IEEE Applied Electronics International Conference, Pilsen, Tschechische Republik.

Andreas Grzemba, Martin Schramm: On the Implementation of a Lightweight Generic FPGA ECC Crypto-Core over GF(p). In: IEEE Applied Electronics International Conference, Pilsen, Tschechische Republik.

