

CV

Dr. Sandro Gaycken

Director

Digital Society Institute



CONTACT

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IN A NUTSHELL

Dr. Sandro Gaycken is the director of the Digital Society Institute Berlin, a research institute for strategic digital topics, which Mr Gaycken founded in 2016 with the help of German DAX-companies at ESMT Berlin (<https://www.esmt.org/faculty-research/centers-chairs-and-institutes/digital-society-institute-dsi>).

Mr Gaycken is a technology- and security-researcher, exploring the nexus of digital technology, economies and politics. His research focus is on strategic cyberwarfare, cyberdefense, cyberintelligence, and high security IT. He is a strong advocate of disruptive innovation and regulation in IT-security, proposing to solve the more high-end cyber problems through architectural change with high security IT concepts from computer science, employing a range of interwoven diplomatic tactics, industrial policies and economically beneficial market and investment strategies to create adaptable new architectures and to overcome highly persistent market and policy failures.

Mr Gaycken has published more than 60 articles and five monographs on his topics, including three monographs on strategic cyberwarfare, regularly writes op-eds in leading newspapers and has authored official government publications. He is a fellow of Oxford university's Martin College in the working group on cyberdefence and cyberintelligence, an elected member of the MIT-Harvard roundtable process on strategic cyberstability, a Senior Advisor for the AI Initiative at Harvard Kennedy School, a co-lead in the „Programme Transverse Sécurité Défense, Sec. Cybersecurity“ at French elite university CNAM, since six years a program committee member of Harvard-MIT's annual conference series on cyber norms, which forms the academic backbone of the international cyber norms debate and the UN GGE process. He is also a director for strategic cyberdefense projects, in the NATO SPS Program in military-diplomatic missions, where he presently designs and implements the national cybersecurity and cyberdefense strategy for Jordan and organizes the first NATO conference on cyberdefense with Japan on a military-to-military level, the lecturer for strategic cyberwarfare at the NATO Defense College in Rome, where he teaches two courses every year in the NATO GOFA Course, a member of the benchmarking group for „Industrie 4.0“ standards for the German Ministry of Research BMBF, the director of the cybersecurity working group and associate fellow of the German Council on Foreign Relations (DGAP), a senior fellow at EastWest Institute, and he serves as chief technical architect in a German industrial effort to bring high security IT to the „Industrie 4.0“ universe.

In the past, Mr Gaycken served as a strategist in the first design of a German Foreign and Security Policy on IT-matters, having been the lead-author of the Internet freedom and the cybersecurity/cyberdefence part of the policy, defining some first proposals for German Cyber Foreign Policy, organizing the German Federal Foreign Office's first cyberdiplomacy conference, and lead-authoring the first speech given by a German Minister of Foreign Affairs on Internet matters. He also served as a commentator for Germany's position in the UN GGE

work on international cybersecurity, and addressed the UNO general assembly ambassadors in New York before their first session on international cyberpeace. He testifies as a subject-matter expert in many hearings in the Bundestag and a range of ministries, provides strategic advice to NATO, UNO, G8, EU, IAEA, and a few other governments, and initiated a few governmental working groups within the German Bundestag, bridging gaps between the German large enterprise C-suite and the policymakers on strategic IT-topics, such as the AG Secure Autonomous Cars (with the CDU) and the AG IT Anwenderforum (with the SPD). He has served as a principal expert witness in international court cases concerned with military cyber espionage and cyber sabotage at NATO and for the Bundesstaatsanwalt and is involved in other military cybercounterintelligence activities. He was also part of the “Weissbuch Prozess” of the German Ministry of Defense, developing the German cyberdefense requirements and a cyberdefense strategy and appearing with Minister of Defense Ursula von der Leyen on the “Tag der CDU” during the CDU election campaign, and he was the exclusive moderator of the first (and closed) series of interdepartmental dialogues between the German Ministry of Defense and the Ministry of the Interior. As one of his latest activities, Mr Gaycken was instrumental in the creation of the German-Chinese “No-Spy”-Agreement between Chancellor Angela Merkel and Premier Li Keqiang (<http://www.bloomberg.com/news/articles/2015-10-29/china-working-to-halt-commercial-cyberwar-in-deal-with-germany>).

Apart from government engagements, Mr Gaycken consults large enterprises in the fields of IT, IT-sec and defense on board level. He does high-end security tests and technical penetration testing, serves as advisor to security funds and investment, and authored eleven major industry studies on strategic economic issues and on disruptive technical development in cybersecurity and cyberdefence. Studies include topics such as cyberdefense market development and investment assessment methodologies, cloud security in banking and finance, the development of insurance models and risk measurement methodologies for the German insurance industry, cyberreadiness self-assessment methodologies for small and medium enterprises, the assessment of security quality in IT- and IT-security products, an assessment of strategic issues in industry 4.0, cybersecurity requirements for smart weapons, the use of big data in the aerospace sector, hardware component security, architectural cyberdefense requirements for advanced smart weapon systems and security architecture reviews of several large German technology companies and their products. Mr Gaycken also founded his own cybersecurity company, SECURE ELEMENTS, now HENSOLDT CYBER GmbH, a Joint Venture wt KKR Holdings and Airbus Defense and Space, which applies high assurance computing concepts from DARPA projects to develop unhackable embedded systems for defense purposes. He serves the company as Chief Architect.

Dedicated to an informed democratic discourse, Mr Gaycken gives many public talks and takes pride in writing not only hard science, but also popular science books and numerous op eds. He also serves as a regular commentator on IT-related incidents in the press with appearances and guest reports in a number of international outlets such as The Economist, The Financial Times, The New York Times, Wired, The Times, NBC, Vanity Fair, Al Jazeera, China Today, Forbes,



N24, n-tv, Tagesschau, Heute Journal, 3sat Kulturzeit Deutschlandfunk, Die Zeit, Handelsblatt, FAZ, Süddeutsche Zeitung or Der Spiegel.

CAREER

- Since October 2015

Director, Digital Society Institute, European School of Management and Technology Berlin

- Since January 2015

Senior Researcher, European School of Management and Technology Berlin

- October 2010 – December 2014

Senior Researcher at the Institute of Computer Science, Freie Universität Berlin

- July 2012 – May 2013

IT Foreign Policy Strategist, Policy Planning Staff, Federal Foreign Office of Germany

- January 2008 - September 2010

Researcher at the Institute of Philosophy, University of Stuttgart

- April 2005 – July 2008

Dissertation "Technisches Wissen – zur Wissenschaftstheorie technischen Wissens" in Science and Technology Studies as DFG-Scholar, University of Bielefeld

- April 1996 – February 2003

Studied at the Humboldt University of Berlin & City College New York. Areas of study: philosophy, mathematics, ethnology, indology, theoretical and experimental physics. Master thesis on a formal interpretation of quantum mechanics

ACTIVITIES

HOSTED CONFERENCES

- 2007 - Annual conference of the German Society for Science- and Technology Studies (GWTF) "Between intellectual property rights and open source - science and technology between privatization and universalism", hosted at the University of Bielefeld, Institute of Science- and Technology Studies
- 2009 - Conference of the working group on surveillance technologies in the Society of Computer Science and the SFB Nexus "Location-Based Services in der Überwachung" (Location-based services in surveillance), hosted at the University of Stuttgart
- 2010 - International conference "The First Dutch-German Workshop on Challenges for the Philosophy of Technology in the 21th Century", hosted at the Technical University of Berlin
- 2011 -
 - International conference "The Second Dutch-German Workshop on Challenges for the Philosophy of Technology in the 21th Century", hosted at the Technical University of Delft
 - International conference "Challenges in Cybersecurity", hosted at the German Federal Foreign Office (jointly with the Federal Foreign Office, UNIDIR and IFSH).
- 2012 -
 - Workshop on "IT-Security - Threat and Consequences Modeling", hosted at the Freie Universität Berlin
 - Workshop on "Attribution", hosted at the German Council on Foreign Relations, Berlin
 - International Workshop on "Cyber Incident Disclosure", hosted at the Federal Foreign Office of Germany, Berlin
 - Workshop on "Cybersecurity - Wer ist dafür verantwortlich?", hosted at the German Council on Foreign Relations, Berlin
- 2013 -
 - German Federal Foreign Office, International Conference on „Advanced Strategies in Cybersecurity“, hosted at the Federal Foreign Office, Berlin
 - International Workshop on „International Cyberstrategy“, hosted at the Freie Universität Berlin, Berlin
- 2014 -
 - Harvard-MIT Workshop on „Norms in Cyberspace“, at MIT CSAIL, Boston, USA
 - MIT-Ecole Polytechnique Paris Workshop on „Cyber Fair Play“, at Ecole Militaire, Paris, France
 - DGAP-Lomonossow University Moscow Workshop on „Cybersecurity in Russia“, at DGAP, Berlin
 - EastWest Institute 5th Worldwide Cybersecurity Summit, Berlin

- 2015 –
 - NATO-Conference „Cyberdefense in the Middle East“, at Dead Sea, Jordan
 - Bundestag Workshop “IT-Anwenderforum”, Bundestag, Berlin
- 2016 –
 - Harvard-MIT Workshop on “Norms 4.0”, at MIT CSAIL, Boston, USA
 - NATO-Conference „Cyberdefense Strategy Conference“, at Amman, Jordan
 - ICANN-Lomonossow Conference “International Forum on Cybersecurity and Internet Governance”, Garmisch-Partenkirchen
 - US-German GGE Consultations “Stakeholder Conference”, Berlin
 - DSI-Allianz “Berliner Digital Dialog”, Berlin (series)
 - DSI-Bundestag “IT-Anwenderforum”, Bundestag, Berlin
 - DSI-Bundestag “Netzpolitik und Wirtschaft”, Bundestag, Berlin
 - MIT-Harvard Roundtable “Cyberstability”, at Harvard Belfer Center, Boston, USA
 - DSI Workshop “Vulnerabilites”
 - DSI “Digital Society Conference”, ESMT Berlin
- 2017 -
 - DSI Workshop “Datenschutz Entwicklung”
 - DSI Workshop „Cryptowar“
 - DSI-Allianz “Berliner Digital Dialog 2”, Berlin (series)
 - DSI-Bundestag „IT-Anwenderforum“, Bundestag, Berlin
 - DSI Workshop „Provable Security“
 - ICANN-Lomonossow Conference “International Forum on Cybersecurity and Internet Governance”, Garmisch-Partenkirchen
 - Harvard-MIT Workshop on „Norms 5.0“, at MIT CSAIL, Boston, USA
 - DSI-Bundestag „IT-Anwenderforum 2“, Bundestag, Berlin
 - DSI-Bundestag „IT-Anwenderforum 3“, Bundestag, Berlin
 - DSI Workshop „Medical IT Security Regulation“
 - DSI Workshop “Moving Target Defense Approaches in Cyberdefense”
 - DSI Conference „Digital Society Conference – Reliability Reloaded“
 - DSI Workshop “Assessing the Implications of Blockchain Technologies”

ONGOING ACTIVITIES AND ROLES

- Director, NATO SPS Program, for Projects on National Cyberdefense Strategy
- Fellow, Oxford University’s Martin College on cyberdefense and cyberintelligence
- Member, MIT-Harvard Roundtable on Military Cyberstability
- Program Committee Member, MIT-Harvard Group on Cyber Norms
- Senior Advisor, Harvard Kennedy School AI Initiative
- Co-lead, CNAM Programme Transverse Sécurité Défense
- Senior Fellow, EastWest Institute
- Member of the extended core team for the German Ministry of Research (BMBF), Project INBENZHAP Benchmarking for Industry 4.0
- Permanent reviewer on cybersecurity & cyberpolicy, IEEE, Computer Science Section
- Founder & CA, Secure Elements Inc.

- Fellow, German Council on Foreign Relations (Deutsche Gesellschaft für Auswärtige Politik)

PROGRAM COMMITTEE AND REVIEWING ACTIVITIES

- The Sixth International Conference on Autonomic and Trusted Computing (ATC 09)
- European Institute for Computer Antivirus Research Conference Lisbon (EICAR 2012)
- EastWest Institute 3rd Worldwide Cybersecurity Summit on Agreements, Standards, Policies and Regulations (ASPR 2012)
- EastWest Institute 4th Worldwide Cybersecurity Summit (2013)
- EastWest Institute 5th Worldwide Cybersecurity Summit (2014)
- MIT-Ecole Polytechnique Paris Workshop on „Cyber Fair Play“, at Ecole Militaire, Paris, France (2014)
- MIT-Harvard Workshop on „Norms in Cyberspace“, at MIT CSAIL, Boston, USA (2014-2017)
- Tel Aviv University Scientific Reviewer for Cyber Research Proposals (2016)

LARGER ACQUIRED PROJECTS

- Researcher post, Open C3S at FU Berlin (2012)
- Foundation, Digital Society Institute Berlin (2015)
- Researcher post, TÜV Nord (2016)
- Two researcher posts, Rheinmetall (2016)
- Researcher post, BMWi (2017)
- Two researcher posts, Kuka (2017)
- Financing for Hensoldt Cyber, KKR & Airbus Defense & Space (2017)

Acquired sums so far amount to 20.2 Mio. Euro.

PREVIOUS ACTIVITIES

- Advising member of the G8-GP International Working Group on Nuclear Security
- Advising expert of the EU EC DEVCON Engagement of Scientists Working Group
- Second chairman of the working group on surveillance technologies in the Society of Computer Science (Gesellschaft für Informatik)
- Reviewer for graduations on cybersecurity at the Staff Officer College of the German Army Hamburg (Führungsakademie der Bundeswehr Hamburg)
- Advisor, ammer!partners Security Ventures
- Advisor on the German “Weissbuch” process on Cyberdefense
- Advisor on the German-Chinese “No-Spy”-Agreement
- Moderator of the interdepartmental strategic dialogue of BMI-BMVG on cybersecurity

TEACHING

- Philosophische Grundlagen der Quantenmechanik (SS 02, HU Berlin)
- Theorie und Begründung. Einführung in die Wissenschaftstheorie (SS 08, University of Stuttgart)
- Wirtschaftsethik (WS 08/09, University of Stuttgart)
- Grundlagen der Handlungs- und Entscheidungstheorie (WS 08/09, University of Stuttgart)
- Technik und Politik (SS 09, University of Stuttgart)
- Thomas Hobbes: Leviathan (WS 09/10, University of Stuttgart)
- Technikdeterminismus (SS 10, University of Stuttgart)
- Philosophisches Argumentieren (SS 10, University of Stuttgart)
- A History of Hacking (SS 11, Free University of Berlin)
- Informationsethik (SS 11, Free University of Berlin)
- Taktik in der IT-Sicherheit (WS 11/12, Free University of Berlin)
- Cyberwar und Cybercrime (WS 11/12, Free University of Berlin)
- Einführung Cyberwar (WS 13/14, Free University of Berlin)
- Einführung Cybercrime (SS 14, Free University of Berlin)
- Cybersecurity Management (2016, ESMT Berlin)
- Hacking for Executives (2016, ESMT Berlin)
- Corporate and Industrial Cybersecurity (2016, ESMT Berlin)
- Cybersecurity Innovation and Management (2017, ESMT Berlin)
- Cybersecurity (2017, HTW Berlin)
- Strategic Cyberwarfare (2014 - 2017, NATO Defense College)

LECTURESHIPS

- Wissenschaftstheorie der Technikwissenschaften (SS 11, Lehrauftrag, TU Cottbus)

PUBLICATIONS

BOOKS

Monographies

- "Technisches Wissen - Denken im Dienste des Handelns", LIT-Verlag (Reihe Technikphilosophie), Berlin 2010
- "Cyberwar – Das Internet als Kriegsschauplatz", Open Source Press, München 2010, 2. Edition 2011
- "Einführung Cyberwar", OS publication, online at: https://www.inf.fu-berlin.de/groups/ag-si/pub/Cyberwar_SB1-5_V160114.pdf, Berlin 2015
- "Einführung Cybercrime", OS publication, online at: https://www.inf.fu-berlin.de/groups/ag-si/pub/Cybercrime_SB1-5_V160614.pdf, Berlin 2015
- "A Theory of Cybersecurity (working title)", forthcoming 2018

Popular Science Monographies

- "Cyberwar – Das Wettrüsten hat längst begonnen: Vom digitalen Angriff zum realen Ausnahmezustand", Goldmann Verlag, March 2012

Anthologies

- "1984.exe – Gesellschaftliche, politische und juristische Aspekte moderner Überwachungstechnologien" (wt. C. Kurz), transcript-Verlag, Bielefeld 2008, 2. Auflage 2009
- "Neue Utopien - Zum Wandel eines Genres" (mit S. Dickel, T. Knobloch, R. Steltemaiер), Manutius-Verlag, Heidelberg 2009
- "The Secure Information Society" at Springer Science (wt. Jörg Krüger and Bertram Nickolay), Springer Science, Berlin 2013, online at: <http://www.springer.com/computer/general+issues/book/978-1-4471-4762-6>
- "Jenseits von 1984 - Datenschutz und Überwachung in der fortgeschrittenen Informationsgesellschaft. Eine Versachlichung", transcript-Verlag, Bielefeld 2013
- „Information Security of Highly Critical Wireless Networks“ (wt Martellini, M., Abaimov, S., Gaycken, S., Wilson, C.), Springer Science, Heidelberg 2017

Scientific Series

- Editor in Chief: "Springer Briefs on Cybersecurity"

The series provides surveys on a wide range of cybersecurity topics, combining technical and non-technical contributions. Apart from the topical series, a special series of country briefings covers national approaches to cybersecurity to promote the international dialogue. At Springer Science, online at: <http://www.springer.com/series/>

Topics Series:

- R. Weber & U. Heinrich, Anonymization, 2012, online at: <http://www.springer.com/series/>
- A. Maurushat, Disclosure of Security Vulnerabilites, Legal and Ethical Issues, 2013, online at: <http://www.springer.com/series/>
- H. Tiirmar-Klaar & P. Martini, Botnets, 2013, online at: <http://www.springer.com/series/>
- W. Rebecca, Data Security Breaches and Privacy in Europe, 2013, online at: <http://www.springer.com/series/>
- N. Andrade & G. Wills, Electronic Identity, 2014, online at: <http://www.springer.com/series/>
- E. Stalla-Bourdillon, Ryan & Phillips, Privacy vs Security, 2014, online at: <http://www.springer.com/series/>
- S. Goel & P. Vagelis, Smart Grid Security, 2015, online at: <http://www.springer.com/series/>
- T. Tropina & C. Callanan, Self- and Co-regulation in Cybercrime, Cybersecurity and National Security, 2015, online at: <http://www.springer.com/series/>
- W. Kleinwächter, ICANN Transition and the Future of Internet Governance, 2017
- G. Becker & A. Bajic, Moving Target Defense, forthcoming 2017

Country series:

- M. Dunn-Cavelty, Cybersecurity in Switzerland, 2014, online at: <http://www.springer.com/series/>
 - I. Ben-Israel, L. Tabansky, Cybersecurity in Israel, 2015, online at: <http://www.springer.com/series/>
 - P. Baumard, Cybersecurity in France, 2017
 - M. Schallbruch, I. Skierka, Cybersecurity in Germany, forthcoming 2018
- Editor in Chief: "Industrial and Embedded Cybersecurity", Springer Science Essentials

This series will explain and discuss technical, regulatory and economic topics and challenges surrounding IT-security in industrial and embedded IT. Forthcoming 2017

Studies and Assessments

- Industrial Study Cyberdefense (2011)
- Industrial Study Cyberdefense Market Development (2012)
- Industrial Study Cyberdefense Technologies (2013)
- Industrial Study Cybersecurity in Aerospace (2013)
- Industrial Study Secure Clouds in Banking and Finance (2013)
- Assessment Cyber Counterintelligence Case NATO (2013),
<http://www.spiegel.de/politik/deutschland/spionage-prozess-ex-nato-mitarbeiter-muss-sieben-jahre-in-haft-a-934455.html>
- Industrial Study Cyber Risk Development (2014)

- Industrial Study Cyber Insurance (2014)
- Assessment Security of Smart Guns (2014)
- Industrial Study Cloud Security for Defense Industries (2015)
- Due Dilligence Assessment (2016)
- Industrial Study DIHK Cyberreadiness for Small and Medium Enterprises (2016, public and online at: www.dihk.de/ressourcen/downloads/dsi-dihk-studie-cyberreadiness/at_download/file?mdate=1448960827021)
- Industrial Study Big Data Application in Aerospace (2016)
- Industrial Study Hardware Component Security (2017)
- Due Dilligence Assessment (2016)
- Industrial Study Cyberdefense in Weapon Platforms (2017)
- Assessment Security of a Weapon Platform (2017)
- Assessment Security of Transportation (2017)
- Due Dilligence Assessment (2017)

ARTICLES

Peer-Reviewed Articles

- "Counter-Development - The Accessibility of Illegitimate Technologies as an Expert's Obligation", in: International Journal of Technology, Knowledge and Society, Vol. 2/1, Cambridge 2007
- "Counter-Development - Technological Opposition as an Ethical Duty", in: PRISE Conference Proceedings, Deliverable D 7.3, Wien 2008
- "To Know in Order to Do – Technological Knowledge as a Guide to Technological Action", in: Brey/Swiestra/Verbeek et al (Hgs.), Converging Technologies, Changing Societies - Proceedings of the SPT, SPT2009, Enschede 2009
- "Technisches Wissen als Handlungsanleitung - Ein Paradigma für eine Wissenschaftstheorie technischen Wissens?", in: K. Kornwachs et al., Technologisches Wissen, Berlin 2010
- "The Necessity of (Some) Certainty - A Critical Remark Concerning Matthew Sklerov's Concept of 'Active Defense'", in: Journal of Military and Strategic Studies - JMSS, Vol 12, No 2 (2010): Winter 2009/2010
- "Entnetzung statt Vernetzung - Paradigmenwechsel bei der IT-Sicherheit" (gem. mit Michael Karger), in: Multimedia und Recht (MMR) 2011, 3
- "Informationelle Selbstbestimmung und narrativistische Perzeption – Zur Konstitution informationellen Vertrauens", in: Datenschutz und Datensicherheit, April 2011
- "Get Cyber Real! - A Reply to Eneken Tikk's 'Ten Rules for Cyber Security'", in: Survival, Volume 53, Issue 5, 2011
- "Zero Day Governance – A(n Inexpensive) Solution to the Cyber Security Problem", in: Harvard – MIT Cyber Dialogue: What is Stewardship in Cyberspace?, April 2012, online at: <http://www.cyberdialogue.ca/readings/>
- "Cyber as a Deterrent - Understanding Cyber Capabilities as a Lever of Power", in: Springer Briefs in Computer Security, London 2013

- "Back to Basics: Beyond Network Hygiene" (wt. Felix Lindner), in: Melissa Hathaway, Best Practices for Computer Network Defence, SPS Publication, Brussels 2014
- "Resetting the System – Why High Security Computing Should be a Policy Priority" (wt. Greg Austin), in: EastWest Discussion Papers, New York 2014
- "Cyberdefense – Worst of All Cyber Construction Sites", in: Georgetown Journal on International Politics, Special Cyber Edition, Washington DC 2014
- "Recurring questions pertaining to the possible military dimensions of cyber warfare" (wt. Clay Wilson, Maurizio Martellini), in: Proceedings of the Tenth International Forum ICANN/Lomonossow on Partnership of State Authorities, Civil Society and the Business Community in Ensuring International Information Security, Moscow 2016
- „Cyberweapons“, in: Oxford Handbook on Cybersecurity, P. Cornish ed., Oxford University Press, forthcoming 2018

Invited Articles

- "Rhetorik und Realität der Überwachung", in: Leipziger Kamera (Hg.), Kontrollverluste. Interventionen gegen Überwachung, Leipzig 2009
- "Gegenüberwachungstechnik. Die Zugänglichkeit von Überwachungstechnologie als ethische Pflicht des Technikers", in: Blaha/Weidenholzer (Hgs.), Gesellschaft gerecht gestalten, Wien 2009
- "Eine andere Welt ist (technisch) möglich. Zur Dynamik und Lokalität technikzentrierter Utopien am Beispiel des Hacking", in: R. Steltemaier, S. Dickel, S. Gaycken, T. Knobloch (Hgs.), Neue Utopien - Zum Wandel eines Genres, Heidelberg 2009
- "Pervasive Computing und Informationelle Selbstbestimmung – eine technikphilosophische Betrachtung", in: Datenschutznachrichten 1/10, Bonn 2010
- "Wie Cyberwarfare die offenen Informationsgesellschaften gefährdet", in: Rüttgers/Hombach/Düpfner/Burda/Obermann (Hg.), 2020 – Gedanken zur Zukunft des Internets, Essen 2010.
- "Die sieben Plagen des Cyberwar", in: Roman Schmidt-Radefeldt und Christine Meissler (Hg.), Automatisierung und Digitalisierung des Krieges, Forum Innere Führung, Berlin 2011
- "Cybersecurity – ein neues, ein unbekanntes und ein drängendes Feld für die Politik", in: Rana Islam und Robert Schütte (Hg.), Sozialdemokratische Außen- und Sicherheitspolitik im 21. Jahrhundert, Berlin 2011
- "Identität und Identifizierbarkeit im Web 2.0 - Das Problem steigender Konvergenz durch Gesichtserkennung", in: Claudia Hildenbrandt et al., Powision – Technik und Gesellschaft, April 2012
- "Cyber Security for Nuclear Power Plants" (wt. Maurizio Martellini and Tom Shea), Website of the US-Department of State, March 2012, online at: <http://www.state.gov/>
- "Offizielle Versionen versus mögliche Wahrheiten - Cybersecurity und das Problem der Geheimhaltung" in: Ralph Haupter (Hg.), Der digitale Dämon, September 2012
- "Does Not Compute - Old Security vs New Threats", in: Datenschutz und Datensicherheit, Sonderheft zum Stand der Softwaresicherheit, ISSE-Conference Brüssel, September 2012

- "Stille Kriege oder Hochsicherheits-Infogesellschaft – Zwei Extreme der strategischen Zukunft des Cyberwars", in: E. Bettermann, Deutsche Welle (Hg.), Digitale Herausforderung - Internationale Beziehungen im Zeitalter des Web 2.0, October 2012
- "Neue Sicherheitsprobleme der Informationsgesellschaften", in: Cornelia Ulbert, Tobias Debiel, Jochen Hippel, Michèle Roth, Stiftung Entwicklung und Frieden (Hg.), Globale Trends 2013, October 2012
- "Freiheit und Sicherheit in der fortgeschrittenen Informationsgesellschaft", in: Gaycken (Hg.), Jenseits von 1984, Bielefeld 2012
- "Cybersicherheit in der Wissensgesellschaft – Zum Zusammenhang von epistemischer und physischer Unsicherheit", in: C. Daase (Hg.), Verunsicherte Gesellschaft – Überforderter Staat, Zum Wandel der Sicherheitskultur, February 2013
- "Sicherheit und Überwachung", in: A. Grunwald (Hg.), Handbuch Technikethik, May 2013
- "Entnetzung als neues Paradigma der Datensicherheit", in: Forgó/Helfrich/Schneider (Hgs.), Handbuch zum Datenschutz in Unternehmen, München, December 2013
- "Cyber Security Awareness and Norm-development: Practical issues for Engaging Critical Private Actors", Harvard-MIT Workshop on Cyber Norms, Panel Summary, Panel 6, Boston 2013, online at: <http://citizenlab.org/cybernorms2012/summaries.html>
- "Cyberwar und Cyberterror“, in: BKA Herbsttagung, Tagungsband, Wiesbaden 2014
- "Germany after PRISM – a Superpower for the Information Society?“, in: CyFy Journal, New Delhi, February 2014
- "Cybersecurity - Kleiner Katalog der Cyberrisiken", in: Thomas Jäger, Sicherheitsgefahren, March 2014
- "Cyber Nuclear Terrorism and Appropriate Prevention", in: IAEA Conference Proceedings Short Papers, Computer Security in a Nuclear World, July 2015
- "Technik, List und Tod – ein Kommentar zur militärischen Dimension der List", in: Andreas Kaminski, Jahrbuch Technikphilosophie, January 2016
- „IT Market Failure and the Need for a new History“, MIT CCN5 Conference Position Paper, online at: <https://gn.csail.mit.edu/ccn5/papers.html>, March 2017
- “So Far, so Bad – the Complexity-Fear Dilemma in Cybersecurity and Its Lesson for Digitalization at Large”, in: Claudia Linhoff-Popien, Digital Marketplaces Unleashed, September 2017

Public Testimonies & Public Authored Government Publications

- Testimony "Sicherheit im Netz" at the German Bundestag, Enquete Commission Internet and Digital Society, November 2012, online at: <http://www.bundestag.de/internetenquete/>
- The Times - Special Edition: The Security Times – Munich Security Conference: "Shifting the Cybersecurity Paradigm" (Print, January 2013), online at: http://www.theatlantic-times.com/index.php?option=com_content&view=article&id=237%3Asecurity-times&catid=31%3Astatic-content&Itemid=1

- Testimony "IT-Sicherheit" at the German Bundestag, May 2014, online at:
https://www.bundestag.de/blob/278504/448f91d638435d61c8986abc27cbee4a/stellungnahme_sandro_gaycken-pdf-data.pdf
- Testimony, "IT-Infrastructure & Cyberespionage" at the German Bundestag, Commission of Inquiry on the NSA, June 2014, online at:
<https://www.bundestag.de/bundestag/ausschuesse18/ua/1untersuchungsausschuss/-/280848>
- Testimony, "Effektivierung der Kontrolle des Exports von Überwachungssoftware und öffentliche Auftragsvergabe", at the German Bundestag, December 2015, online at:
<https://www.bundestag.de/blob/399462/7254a5fcfd93a6b11261c57579b08e5d/a-drs-18-24-85-data.pdf>

Recensions

- "Ethik in Beispielen und ohne Ethik", Rezension zu »Gewissensbisse: Ethische Probleme der Informatik. Biometrie – Datenschutz – geistiges Eigentum« von Weber-Wulff, Class, Coy and Kurz, in: Zeitschrift für Didaktik der Informatik, 01/2010
- "Update zur Technik. Zum neuesten Stand der philosophischen Technikforschung", in: Philosophische Rundschau, September 2011

POPULAR SCIENCE AND OP EDS

POPULAR SCIENCE ARTICLES

- "Quantenmechanik für Nicht-Physiker", in: 21C3 Proceedings, Berlin 2004
- "Free Software and Anarchism – Does This Compute?", in: 22C3 Proceedings, Berlin 2005
- "Was ist technisches Wissen?", in: 22C3 Proceedings, Berlin 2005
- "Hacktivismus Fokussieren", in: Die Datenschleuder – Wissenschaftliches Magazin für Datenreisende, Berlin, Mai 2006
- "Warum eigentlich nicht", in: Die Datenschleuder – Wissenschaftliches Magazin für Datenreisende, Berlin, November 2007
- "The Trust Situation", in: 25C3 Proceedings, Berlin 2008
- "Der Krieg im Netz – Cyberwar und die Folgen für die Informationsgesellschaft", in: Agora 42 – Magazin für Ökonomie, Philosophie und Leben, Ausgabe: Krieg Light, November 2010.
- "Warum der Datenschutz versagt hat", in: Technology Review, März 2009
- "Die Zukunft des Krieges - Strategische Konzepte und strukturelle Probleme des Cyberwarfare", in: SIGINT09 - Proceedings, Köln 2009
- "A Hacker's Utopia", in: 26C3 Proceedings, Berlin 2009
- "Der Cyberwar und die NATO – Eine inkonsistente Zuständigkeit", in: Internationales Magazin für Sicherheit, Ausgabe: Konflikte der Zukunft, Dezember 2010.
- "Cyberwar – Trend oder Revolution", in: ADLAS – Magazin für Außen- und Sicherheitspolitik, Ausgabe 01/2011
- "Krieg der Rechner", in: Internationale Politik, März/April 2011, Nr.2
- "Was bringt das neue Abwehrzentrum?", in: Geldinstitute, 4/2011
- "Silent Economic Cyberwarfare – A Threat to Every Business", in: Stern Stewart Institute, Periodicals, #5, December 2011
- "Entnetzung als Weg aus der IT-Unsicherheit" (Commentary), in: Promotorenbericht zum Zukunftsprojekt Sichere Identitäten, Berlin 2012
- "Vier Cyber Plättitüden, die Sie nicht kaufen sollten / Four cyber platitudes you should not buy", in: Diplomatisches Magazin, March 2012
- "Ein neuer Kalter Krieg? Eskalationen im Cyberspace", in: ADLAS – Magazin für Außen- und Sicherheitspolitik, Ausgabe 02/2012
- "Stuxnet and Prism – Symptoms of a Policy Failure", in: IP Journal, July 2013 (Title Contribution), online at: <https://ip-journal.dgap.org/>
- "The Democracy Delusion – Why Multistakeholderism in Internet Governance is Wrong and Dangerous", in: IP - International Politics, July 2014
- "Mehr Staat für das Netz", in: IP – Internationale Politik, Juli 2014 (German of the above version)
- "Germany's New Cybersecurity Law – Mostly Harmless", in: US Council on Foreign Relations, online at: <http://blogs.cfr.org/cyber/2015/08/18/germanys-cybersecurity-law-mostly-harmless-but-heavily-contested/>, August 2015

- Reposted: "Why Germany's New Cybersecurity Law Isn't Working", in: Defense One, online at: <http://www.defenseone.com/ideas/2015/08/why-germanys-cybersecurity-law-isnt-working/119208/>, August 2015
- "Fintech – A Complex Disaster in the Making", in: EastWest Institute, online at: <https://www.eastwest.ngo/>, July 2016
- "Blaming Russia For the DNC Hack Is Almost Too Easy", in: US Council on Foreign Relations, online at: <http://blogs.cfr.org/cyber/2016/08/01/blaming-russia-for-the-dnc-hack-is-almost-too-easy/>, August 2016
- "Cyber-Nuklearer Krieg – neue Taktiken im Cyberkrieg mit kritischen Konsequenzen", in: IP - Internationale Politik, October 2016

OP EDS (SELECTION)

- Die ZEIT: "Der Kampf gegen illegale Downloads bedroht die Informationsgesellschaft" (Online, December 2009), online at: <http://www.zeit.de/digital/internet/2009-12/filesharing-demokratie-gaycken>
- Die ZEIT: "Küchentischethik für Fortgeschrittene" (Online, February 2010), online at: <http://www.zeit.de/digital/internet/2010-02/hackerethik-informationsfreiheit>
- Die ZEIT: "Wichtige Rechner müssen vom Netz" (Print, March 2010), online at: <http://www.zeit.de/2010/12/Datensicherheit-Internet-Netzwerke>
- Technology Review (Print, October 2010): "Aufmarsch im Internet", online at: <http://www.heise.de/tr/artikel/Aufmarsch-im-Internet-1102301.html>
- Die ZEIT: "Wer war's? Und wozu?" (Print, November 2010), online at: <http://www.zeit.de/2010/48/Computerwurm-Stuxnet>
- Süddeutsche Zeitung: "Das ist doch gar kein Krieg" (Online, January 2011), online at: <http://jetzt.sueddeutsche.de/texte/anzeigen/517555>
- The European: "Cyberangst und Cybersorge" (Online, January 2011), online at: <http://www.theeuropean.de/sandro-gaycken/5410-cyberangst-und-cybersorge>
- Y – Magazin der Bundeswehr, Sonderausgabe 'Sicherheit 2.0': "Zurück in die Zukunft" (Print, September 2011), not online
- Die ZEIT: "Wir müssen das Internet verkleinern" (Print, June 2011), online at: <http://www.zeit.de/2011/25/USA-Internet-Kontrolle>
- Handelsblatt: ",Nicht sehr souverän" (Print, October 2011), not online
- Sächsische Zeitung: "Denn wir wissen, wer Du bist - Nutzen und Risiken neuer Gesichtserkennung" (Print, January 2012), online at: <http://www.szonline.de/nachrichten/artikel.asp?id=2982464>
- Handelsblatt: "Die digitale Bananenrepublik", online at: <http://www.handelsblatt.com/meinung/gastbeitraege/urheberrecht-die-digitale-bananenrepublik-/6470584.html>
- DW Diskurs: "Cyberwar - Realität oder nicht" (Online, June 2012), online at: <http://diskurs.dradio.de/>

- Handelsblatt: "Strategische Kollateralschäden" (Print, June 2012), online at: <http://www.handelsblatt.com/technologie/it-tk/it-internet/gastkommentar-die-kollateralschaeden-von-obamas-stuxnet/6718152.html>
- Die ZEIT: "Die Kosten der Spionage" (Print, June 2012)
- The Times - Special Edition: The Security Times - Cybersecurity: "The Cyberattackers are on the March"(lead article) (Print, September 2012), not online
- Handelsblatt: "Die nächste Eskalationsstufe" (Print, October 2012), online at: <http://www.handelsblatt.com/technologie/it-tk/it-internet/gastkommentar-die-kollateralschaeden-von-obamas-stuxnet/6718152.html>
- Handelsblatt: "Sackgasse für die Freiheit – Kritik am Multi-Stakeholder-Modell der Internet Governance“ (Print, December 2012), not online
- Handelsblatt: "Der diebische Leviathan – In der US Cyberpolitik zu China deutet sich eine Wende an“ (Print, January 2013), not online
- Cicero: "Snowden opferte sein Leben für ein offenes Geheimnis“ (July 2013), online at: <http://www.cicero.de/weltbuehne/edward-snowden-nsa-skandal-fachkreisen-war-niemand-ueberrascht/54999>
- Handelsblatt: "Ein neuer Cyber Military Complex“ (July 2013), not online
- Handelsblatt: "Deutsche Daten“ (October 2013), not online
- The Times - Special Edition: The Security Times - Cybersecurity: "The Cyberattackers are on the March"(lead article) (Print, September 2012), not online
- The Times - Special Edition: The Security Times – Cybersecurity: "World Wide Web Divided – Germany after Snowden“ (Print, November 2013)
- FAZ: "Wirtschaftswunder braucht Sicherheit“ (November 2013), online at: <http://www.faz.net/aktuell/feuilleton/debatten/europas-it-projekt/sandro-gaycken-cyberwar-experte-wirtschaftswunder-brauchen-sicherheit-12673264.html>
- Handelsblatt: "German Cyber“ (December 2013), not online
- The Times – Special Edition: The Security Times - Cybersecurity: "The New Cyber Markets“, (Print, February 2014)
- Süddeutsche Zeitung: "Werft die Computer weg!“, (Print, February 2014)
- Süddeutsche Zeitung: "Freies Netz – eine Illusion“, (Print, March 2014)
- Handelsblatt: "Viele tote Winkel“, (Print, July 2014)
- Handelsblatt: "Schlechte Strategie“, (Print August 2014)
- Süddeutsche Zeitung: "Frei ist das Netz schon lange nicht mehr“, (Print August 2014)
- The Times - Special Edition: The Security Times - Cybersecurity: „New Threats and Trends in Cybersecurity“ (Print, January 2015)
- Handelsblatt: "Das Netz der Demagogen" (Print, March 2015)
- FAZ: "Spionage? Kein Grund zur Aufregung" (Print, April 2015)
- ZEIT: "Was will dieser Mann? " (Print, May 2015)
- FAZ: "Wer steckt hinter den NSA-Enthüllungen" (Print, July 2015)
- Süddeutsche: „Leichte Beute für Hacker" (Print, October 2015)
- Tagesspiegel: "Ohne Cyberverteidigung keine Sicherheit" (Print, November 2016)
- FAZ: "Apples Doppelmoral" (Print, März 2016)

- Handelsblatt: "Warum Führungskräfte digitale Kompetenz brauchen" (Print, May 2016)
- Handelsblatt: "Der mysteriöse Hades des Internets" (Print, July 2016)
- Süddeutsche: "Feind liest mit" (Print, August 2016)
- Handelsblatt: "Der gehackte Superhacker" (Print, August 2016)
- FAZ: "Der viel zu offensichtliche Russe" (Print, August 2016)
- FAZ: "Die Manipulation des Netzes" (Print, Oktober 2016)
- Handelsblatt: "IT können wir doch!" (Print, November 2016)
- FAZ: "Der Untergang der Demokratie in der Information" (Print, November 2016)
- Handelsblatt: „Wir brauchen ein digitales Navi“ (Print, Januar 2017)
- FAZ: „Eine gigantische, verzögerte Explosion“ (Print, March 2017)
- Forbes: „On Cyber Attacks and the Accidental War“ (Print, May 2017)
- FAZ: „Mord durch Herzschritthacker“ (Print, August 2017)
- Handelsblatt: „Die Cyberrisiken der intelligenten Maschinenwelten“ (Print, November 2017)

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