Nicholas Kolokotronis

Curriculum vitae

January 2024

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Education

1998–2003 Ph.D. in Cryptography

University of Athens, Department of Informatics and Telecommunications

Thesis: Nonlinear signal processing and applications to cryptography

1996–1998 M.Sc. in Computer Science

University of Athens, Department of Informatics and Telecommunications

Specialization: High Performance Algorithms

Grade: 8,55/10

Thesis: Image compression, progressive transmission, and selective decompression by using

wavelets

1990–1995 B.Sc. in Mathematics

Aristotle University of Thessaloniki, Department of Mathematics

Specialization: Applied Mathematics

Grade: 7,85/10

Awards

1994 Hellenic State Scholarship's Foundation (IKY) award for performance excellence during the third academic year of undergraduate studies

Positions held

Main position

2023-today Professor

University of Peloponnese, Department of Informatics and Telecommunications

2019–2023 Associate professor

University of Peloponnese, Department of Informatics and Telecommunications

2012-2019 Assistant professor

University of Peloponnese, Department of Informatics and Telecommunications

2008-2012 **Lecturer**

University of Peloponnese, Department of Informatics and Telecommunications

2004-2008 Adjunct faculty

University of Peloponnese, Department of Informatics and Telecommunications

Other positions

2021 - today Scientific advisory board member

LOGOS Research and Innovation

2005-today	Adjunct faculty University of Athens, Department of Informatics and Telecommunications
2015-2017	Visiting instructor Open University of Cyprus, Faculty of Pure and Applied Sciences
2004-2006	Adjunct faculty University of Piraeus, Department of Digital Systems
2002-2004	IT consultant European Dynamics SA, e-Business Division
2001-2002	Software engineer Hellenic Armed Forces, Research and Informatics Corps
1998-2001	Research assistant University of Athens, Department of Informatics and Telecommunications

Research interests

- **Applied cryptography**: block/stream ciphers and pseudorandom generators, s-box design, boolean functions, statistical cryptanalysis, blockchain
- Modern cryptography: weak and strong pseudorandom functions (PRFs), semantic security, cryptographic applications of statistical learning (LPN, LWE, etc.), game theoretic cryptography
- **Post-quantum cryptography:** code-based cryptosystems, general decoding attacks (ISD), lattice-based cryptosystems, quantum algorithms
- **Privacy technologies**: privacy-preserving methods, anonymity protocols/systems, homomorphic encryption, statistical database security
- Cyber—security: IoT security, network security protocols, wireless security, security in M2M communications
- PHY layer security: information—theoretic security, cooperative protocols (DF, AF, CJ), game—theoretic security, partner selection schemes
- Trust management: trust models, reputation management, game theory and trust, information—theoretic trust notions
- Error correcting codes: random codes, probabilistic (list) decoding and complexity issues, codes for the wiretap channel, joint error correction and encryption

Teaching experience

Postgraduate

2018-today	Big Data security, privacy and trust (co-instructor)	Univ. Peloponnese
2018-today	Topics in cryptography and security	Univ. Peloponnese
2005-today	Systems security (co-instructor)	Univ. Athens
2015-2017	Computer and network security: advanced topics (co-instructor)	Univ. Cyprus
2013-2015	Topics in cryptographic algorithms design	Univ. Peloponnese
2013-2015	Topics in communications security	Univ. Peloponnese
2009-2011	Cryptography and applications	Univ. Peloponnese
2009-2011	Information theory and coding	Univ. Peloponnese
2005	Networked systems security	Univ. Piraeus
1998-2000	Information theory and coding (co-instructor)	Univ. Athens

Undergraduate

2017-today	Discrete mathematics	Univ. Peloponnese
2004-today	Cryptography	Univ. Peloponnese
2004-today	Systems security	Univ. Peloponnese
2013-2016	Probability and statistics (co-instructor)	Univ. Peloponnese
2015	Mathematics II (co-instructor)	Univ. Peloponnese
2012-2013	Linear algebra and number theory (co-instructor)	Univ. Peloponnese
2009-2013	Information theory and coding	Univ. Peloponnese
2007-2008	Introduction to programming	Univ. Peloponnese
2006	Advanced cryptography	Univ. Peloponnese
2005	Number theory	Univ. Peloponnese
2004-2005	Information security	Univ. Piraeus
2004	Signals and systems	Univ. Piraeus
1998-2000	Digital signal processing (co-instructor)	Univ. Athens

Supervision of students

Doctoral

Supervisor

	Supervisor	
2018	S. Brotsis, Security of consensus protocols and distributed ledger technologies	ongoing
2018	G. Germanos, Cyber-security and privacy in the Internet of things	ongoing
2015	P. Smyrli, Post-quantum cryptography: code-based cryptosystems	ongoing
	Advisory committee member	
2017	EM. Athanasakos, Physical layer security	ongoing
2016	K. Katsanos, Sigmoidal programming and applications in signal processing and communications	ongoing
	Co-supervisor	
2013	K. Ntemos, Stochastic games, cognitive radio networks, and security	ongoing
2007	K. Limniotis, Cryptographically—related complexity measures for binary sequences	completed
	Postgraduate	
2018	V. Haskos, Cyber–range systems: overview and open challenges	ongoing
2016	I. Lytsiou, Cryptocurrencies: models, security, and applications	completed
2016	I. Galanos, Social networks and personal data protection	completed
2015	C. Karzis, Formal security models in symmetric cryptosystems	completed
2015	S. Brotsis, Hard problems with applications in the design of public–key cryptosystems	completed
2015	I. Christakis, Man-in-the-middle attacks in SSL/TLS network security protocols	completed
2014	M. Athanasakos, Security of wireless communications against passive attacks at the physical layer	completed
2014	P. Smyrli, Code-based cryptosystems: constructions and attacks	completed
2014	N. Charitos, Security at the internet of things	completed

2013 2013 2012 2012 2011 2010	J. Faklaris, Smart grid security T. Mouratis, Secure electronic mail services in iOS platform Z. Dermatis, Secure routing in wireless mobile networks M. Droulia, Cognitive radio network security A. Schizas, Cryptanalytic attacks on the RSA algorithm E. Bozis, Security analysis and implementation issues of authentication protocols	completed completed completed completed completed completed completed
2010	Undergraduate K. D. Grammatikakia, Makuara datastian and analysis	
2018 2018	KP. Grammatikakis, Malware detection and analysis C. Doukas and K. Melanitis, Topics in cryptography and security on the web	ongoing ongoing
2016	D. Mentesidis, Wireless communication technologies for public safety	completed
2015	G. Panagopoulos, Trust management models in P2P networks	completed
2015	G. Geramanis, Attacks on anonymity services and protocols	completed
2014	S. Magklaris, Poodle and related attacks on SSL/TLS security protoco	ls completed
2011	V. Vlahogianni, Security/authentication issues in RFID tags	completed
2010	G. Gogolis, Analysis and implementation of RBAC security model (co-supervisor)	completed
2009	K. Psarakis, Services and security in e-banking systems	completed
2008	M. Grimani, Analysis of cryptographic characteristics in contemporary stream ciphers	/ completed
2007	E. Aggelis, Security analysis of the new version of the IPsec protocol	completed
2006	M. Anthi and E. Kasimati, Turbo codes and interleavers based on permutation polynomials (co–supervisor)	completed
2005	DR. Koukoutsaki and DE. Reggli, Overview of modern cryptographic and cryptanalytic techniques (co-supervisor)	completed
	Committees, working groups	
	Administrative positions	
2018-today	Head of the cryptography and security group	Dept. IT
2018-today	Member of the Steering Committee of the postgraduate studies program in <i>Data Science</i>	Dept. IT
2018-today	Member of the Steering Committee of the postgraduate studies program in <i>Computer Science</i>	Dept. IT
2008-today	Member of the department's Assembly	Dept. IT
2018	Member of the steering committee preparing the proposal for the certification of the department's undergraduate studies program	Dept. IT
2008-2017	Member of the algorithms, cryptography and computational logic group	Dept. IT
2011-2017	Member of evaluation committees for the procurement of goods	Univ. Peloponnese
2015-2016	Member of the undergraduate studies program committee	Dept. IT
2010-2016	Department's leader in the NSRF project "higher education training at the University of Peloponnese"	Univ. Peloponnese
2009-2016	Member of the development and maintenance team of the website	Dept. IT

	dit.uop.gr Member of the NSRF project "information system development for the quality assurance unit at the University of Peloponnese" Member of the undergraduate studies program committee **Dept. 17**		
	Evaluation committees Member of external evaluation committee for tenders submitted to the General Secretariat of Commerce (GSC), Ministry of Development Regular evaluator of research projects and proposals submitted to the General		
2017 2000–2002	Secretariat for Research and Technology (GSRT) Expert working groups Member of working group for the professional training of security officers in special topics of the General Data Protection Regulation (GDPR) EU 2016/679 Member of working groups for the professional training of the National Committee of Telecommunications and Posts (NCTP) staff on issues of telecommunication networks security		
1998-today	Other memberships Member of the IEEE (computer and IT soc Academic service	eties)	
Editor	• AE: EURASIP J. Wireless Commun. Netw	<i>I</i> .	2009-2017
Reviewer	 Adv. Math. Commun. Appl. Algebra Engrg. Comm. Comput. Benchmarking Int. J. Comput. Standards Interfaces Cryptogr. Commun. Des. Codes Cryptogr. 	 IEEE Trans. Inf. Theory IEEE Trans. Multimedia IEEE Trans. Vehicular Te Inform. Comput. Securi Inform. Process. Lett. Int. J. Commun. Syst 	

Des. Codes Cryptogr.

o Discrete Appl. Math.

Discrete Math.

• EURASIP J. Wireless Commun. Netw.

• Finite Fields Appl.

o IEEE Commun. Lett.

o IEEE Consum. Electron. Mag.

o IEEE Trans. Commun.

o IEEE Trans. Ind. Informat.

o IEEE Trans. Inf. Forensics & Security

o Int. J. Commun. Syst.

o Int. J. Comput. Math.

o Int. J. Electron. Governance

o J. Appl. Math. Comput.

J. Complexity

o J. Comput. Sci. Tech.

o J. Signal Image Video Process.

o Security Commun. Netw.

o Signal Process.

TPC member • E-DEM (Conf. e-Democracy Security Priv. Trust)

o DSP (Int. Conf. Digit. Signal Process.)

• EUSIPCO (Eur. Signal Process. Conf.)

• ICASSP (Int. Conf. Acoust. Speech Signal Process.)

o ICCS (Int. Conf. Comput. Sci.)

2013, 2015, 2017

2009, 2011

1998, 2008

2012

2006-2007

	o IEEE GLOBECOM (Commun. Inf. Security Symp.)	2009
	o IEEE ICC (Int. Conf. Commun.)	2011
	o IEEE ISCAS (Int. Symp. Circuits Syst.)	2003
	o IEEE ISIT (Int. Symp. Inf. Theory)	2003, 2011, 2013, 2015
	o IEEE MELECON (Mediterranean Electrotech. Conf.)	2016
	o IEEE WDFIA (Wkshp Digit. Forensics Incident Anal.)	2007-2010
	o ISC (Int. Conf. Inf. Security)	2017
	o ISPEC (Inform. Security Pract. Experience Conf.)	2014
	MCIS (Mediterranean Conf. Inf. Syst.)	2009
	o PARA (Wkshp SoA Sci. Parallel Comput.)	2006
	o PCI (Panhellenic Conf. Inform.)	2010
	o STM (Int. Wkshp Security Trust Manag.)	2018
Publicity	o STM (Int. Wkshp Security Trust Manag.)	2018

Projects, grants

Grants

2006–2008 Study of complexity and pseudorandomness properties in symmetric encryption algorithms

Coordinator: University of Athens Grant no.: 70/3/8470 Funding: British Council Budget: 16,0 K€

Responsibilities: Principal investigator

2005 Study of stream ciphers in symmetric cryptography

Coordinator: University of AthensGrant no.: 70/4/7818Funding: University of AthensBudget: 4,5 K€

Responsibilities: Principal investigator

Research projects

2021–2024 ELECTRON: Resilient and self-healed electrical power nanogrid

Coordinator: Instrasoft International Grant no.: 101021936 (SU-DS04-2018-2020)

Funding: European Commission, H2020 Budget: 10,2 M€

Responsibilities: Team member

2020-2023 TERMINET: Next generation smart interconnected IoT

Coordinator: University of Western Macedonia Grant no.: 957406 (ICT-56-2020)

Funding: European Commission, H2020 Budget: 8,0 M€

Responsibilities: Team member

2019–2022 FORESIGHT: Advanced cyber–security simulation platform for preparedness training in aviation, power–grid and naval environments

Coordinator: European Dynamics SA Grant no.: 833673 (SU-DS01-2018)

Funding: European Commission, H2020 Budget: 6,0 M€

Responsibilities: Team leader, work package leader, project technical manager — also among the

key members leading the proposal's preparation/drafting

2018–2021 CYBER-TRUST: advanced cyber—threat intelligence, detection, and mitigation platform for a trusted Internet of things

Coordinator: Center for Security Studies Grant no.: 786698 (DS-07-2017)

Funding: European Commission, H2020 Budget: 3,0 M€

Responsibilities: Team leader, work package leader, project technical manager — also responsible for the preparation/drafting of the proposal and its key innovative ideas (ranked 1st among 63 proposals with score 15/15)

2013–2016 HANDICAMS: heterogeneous ad-hoc networks for distributed, cooperative, and adaptive multimedia signal processing

Coordinator: Katholieke Univ. Leuven

Grant no.: FET-323944

Funding: European Commission, FP7

Budget: 2,0 M€

Responsibilities: Team member, work package leader

2012–2015 ART-IN-SPACE: adaptive, robust to threats, immune to nonlinearities, sparse opportunistic cognitive radio

Coordinator: University of AthensGrant no.: 70/3/11918Funding: NSRF Excellence ProgramBudget: 157,5 K€

Responsibilities: Team member, work package leader

2012-2015 SWINCOM: secure wireless nonlinear communications at the physical layer

Coordinator: University of AthensGrant no.: 70/3/11668Funding: NSRF Thalis ProgramBudget: 512,8 K€

 $\textit{Responsibilities:} \ \text{Team leader, work package leader} - \text{also responsible for the preparation and}$

drafting of the proposal

2004–2007 ECON-TISP: application of economic theories to design and develop telecommunications and information systems and products

Coordinator: University of Athens Grant no.: 56/90/7425
Funding: Community Support Frwk III Budget: 90,0 K€

Responsibilities: Principal investigator

2004–2007 SECURE–JUSTICE: secure communication and collaboration framework for the judicial cooperation environment

Coordinator: Project Automation SpA Grant no.: IST-2002-507188

Funding: European Commission, FP6 Budget: 5,4 M€

Responsibilities: Team manager

2002–2005 DIASTASIS: digital era statistical indicators – definition, measurement and exploitation of new socio-economic indicators correlating web usage statistical data and household research

Coordinator: European Dynamics SA Grant no.: IST-2000-31083

Funding: European Commission, FP5 Budget: 2,0 M€

Responsibilities: Project manager

2002–2005 ICTE-PAN: methodologies and tools for building intelligent collaboration and transaction environments in public administration networks

Coordinator: European Dynamics SA Grant no.: IST-2001-35120

Funding: European Commission, FP5 Budget: 3,2 M€

Responsibilities: Team member

2000–2001 CHANNEL SOUNDER: development of an intelligent measurement device for the multidimensional characterization of broadband radio channels

Coordinator: Nat. Tech. Univ. AthensGrant no.: 61/1189Funding: General Secretariat R&TBudget: 176,1 K€

Responsibilities: Team member

1999–2001 BILLING MALL: development of an integrated e-commerce platform for secure billing management in subscription services

Coordinator: University of Athens Grant no.: 70/3/4483
Funding: General Secretariat R&T Budget: 1,1 M€

Responsibilities: Team member

1996-1998 EUROMED: technologies for founding of a european telemedical information society

Coordinator: Nat. Tech. Univ. Athens Grant no.: 70/3/2723
Funding: European Commission, TEDIS Budget: 1,6 M€

Responsibilities: Team member

Consulting projects

2007 Technical action plan and specifications of supplementary technical infrastructures for operating the General Business Register (GBR)

Coordinator: University of Athens Grant no.: 70/3/9291

Funding: General Secretariat Comm. Budget: -

Responsibilities: Team member

2000 Consulting services for supporting the Public Power Corporation (PPC) enter the telecommunications market

Coordinator: University of Athens Grant no.: 70/3/5328

Funding: Public Power Corporation Budget: -

Responsibilities: Team member

2000 Public consultation and tender documents of individual licenses for the provisioning of mobile communication, fixed wireless access, and DECT services

Coordinator: University of Athens Grant no.: 70/3/5255

Funding: Nat. Comm. Telecomm. Posts Budget: -

Responsibilities: Team member

1999 Development of telecommunications security policies

Coordinator: University of Athens Grant no.: 70/3/4706

Funding: Ministry Transp. Telecomm. Budget: -

Responsibilities: Team member

Research activities

Invited talks

- o Cryptographic Boolean functions with maximum algebraic immunity. 2016 International Conference on Cryptography, Cyber-Security, and Information Warfare, May 2016, Athens, Greece
- On the computation of best second—order approximations of boolean functions. 2014 International Conference on Cryptography, Network Security and Applications in Armed Forces, Apr. 2014, Athens, Greece
- Code-based public-key cryptosystems: constructions and attacks. 2014 Athens Cryptography Day (ATHECRYPT), Jan. 2014, Athens, Greece
- o Cryptanalytic attacks and related criteria for stream and block ciphers. 2011 Intensive Program on Information Communication Security (IPICS), Aug. 2011, Corfu, Greece
- Towards computing best quadratic approximations. *Information Security Group, Royal Holloway University of London*, Dec. 2006, Surrey, U.K.
- E-commerce security. National Committee of Telecommunications and Posts, Nov. 2002, Athens, Greece

- Analysis and design of symmetric cryptographic algorithms. 2001 National Conference on Cyberspace Security and Hacking, Oct. 2001, Athens, Greece
- Telecommunications security. National Committee of Telecommunications and Posts, Apr. 2000, Athens, Greece

Schools, seminars

• Topics in cryptographic design and cryptanalysis. *ECRYPT Summer School*, May 2007, Samos, Greece

Publications

Books, monographs, book editions

- [1] S. Shiaeles and N. Kolokotronis, *Proceedings of the 2022 IEEE International Conference on Cyber Security and Resilience (CSR)*. IEEE Press, July 2022. [online]
- [2] G. Sargsyan, D. Kavallieros, and N. Kolokotronis, *Security Technologies and Methods for Advanced Cyber Threat Intelligence, Detection and Mitigation.* Now Publishers, March 2022. [online]
- [3] S. Shiaeles, N. Kolokotronis, and E. Bellini, *Proceedings of the 2021 IEEE International Conference on Cyber Security and Resilience (CSR)*. IEEE Press, July 2021. [online]
- [4] S. Shiaeles and N. Kolokotronis, *Internet of Things, Threats, Landscape, and Countermeasures*. CRC Press, April 2021. [online]
- [5] N. Kolokotronis and S. Shiaeles, *Cyber-Security Threats, Actors, and Dynamic Mitigation*. CRC Press, April 2021. [online]
- [6] P. Kanellis, E. Kiountouzis, N. Kolokotronis, and D. Martakos, *Digital crime and forensic science in cyberspace*. IGI Global Publishing, April 2006. [online]
- [7] N. Kolokotronis, "Nonlinear signal processing and applications to cryptography," Ph.D Thesis, Department of Informatics and Telecommunications, National and Kapodistrian University of Athens, December 2003. [online]

Book chapters and edited volumes

- [8] A. Varelias, K. Limniotis, and N. Kolokotronis, "Cryptographic properties of boolean functions generating similar De Bruijn sequences," in *Analysis, Cryptography and Information Science*, N. J. Daras, P. M. Pardalos, and M. T. Rassias, Eds. World Scientific Publishing, 2023, pp. 233–262, **Accepted**. [online]
- [9] E. Chaskos, J. Diakoumakos, N. Kolokotronis, and G. Lepouras, "Gamification mechanisms in cyber range and cyber security training environments," in *Handbook of Research on Gamification Dynamics and User Experience Design*, O. Bernardes, V. Amorim, and A. Carrizo Moreira, Eds. IGI Global Publishing, May 2022, pp. 363–383. [online]
- [10] C.-M. Mathas, C. Vassilakis, N. Kolokotronis, and K. P. Grammatikakis, "Trust management system architecture for the Internet of things," in *Security Technologies* and *Methods for Advanced Cyber Threat Intelligence, Detection and Mitigation*, G. Sargsyan, D. Kavallieros, and N. Kolokotronis, Eds. Now Publishers, March 2022, pp. 130–160. [online]
- [11] S. Brotsis, N. Kolokotronis, and K. Limniotis, "Towards post-quantum blockchain platforms," in Security Technologies and Methods for Advanced Cyber Threat Intelligence,

- Detection and Mitigation, G. Sargsyan, D. Kavallieros, and N. Kolokotronis, Eds. Now Publishers, March 2022, pp. 105–130. [online]
- [12] K. P. Grammatikakis, I. Koufos, and N. Kolokotronis, "Moving-target defense techniques for mitigating sophisticated IoT threats," in *Security Technologies and Methods for Advanced Cyber Threat Intelligence, Detection and Mitigation*, G. Sargsyan, D. Kavallieros, and N. Kolokotronis, Eds. Now Publishers, March 2022, pp. 51–73. [online]
- [13] K. P. Grammatikakis and N. Kolokotronis, "Attack graph generation," in *Cyber-Security Threats, Actors, and Dynamic Mitigation*, N. Kolokotronis and S. Shiaeles, Eds. CRC Press, April 2021, pp. 281–334. [online]
- [14] I. Koufos, N. Kolokotronis, and K. Limniotis, "Dynamic risk management," in *Cyber-Security Threats, Actors, and Dynamic Mitigation*, N. Kolokotronis and S. Shiaeles, Eds. CRC Press, April 2021, pp. 247–280. [online]
- [15] K. Limniotis and N. Kolokotronis, "Cryptography threats," in *Cyber-Security Threats, Actors, and Dynamic Mitigation*, N. Kolokotronis and S. Shiaeles, Eds. CRC Press, April 2021, pp. 123–158. [online]
- [16] K. P. Grammatikakis and N. Kolokotronis, "System threats," in *Cyber-Security Threats, Actors, and Dynamic Mitigation*, N. Kolokotronis and S. Shiaeles, Eds. CRC Press, April 2021, pp. 81–122. [online]
- [17] D. Kavallieros, G. Germanos, and N. Kolokotronis, "Profiles of cyber-attackers and attacks," in *Cyber-Security Threats, Actors, and Dynamic Mitigation*, N. Kolokotronis and S. Shiaeles, Eds. CRC Press, April 2021, pp. 1–26. [online]
- [18] A. Grigoriadis, E. Darra, D. Kavallieros, E. Chaskos, N. Kolokotronis, and X. Bellekens, "Cyber ranges: The new training era in the cybersecurity and digital forensics world," in *Technology Development for Security Practitioners*, Security Informatics and Law Enforcement, B. Akhgar, D. Kavallieros, and E. Sdongos, Eds. Springer, 2021, pp. 97–117. [online]
- [19] V. G. Bilali, D. Kavallieros, G. Kokkinis, P. Kolovos, D. Katsoulis, T. Anatolitis, N. Georgiou, N. Kolokotronis, O. Gkotsopoulou, C. Pavue, S. Cuomo, S. Naldini, S. Shiaeles, and G. Sargsyan, "Cyber-Trust: Meeting the needs of information sharing between ISPs and LEAs," in *Technology Development for Security Practitioners*, Security Informatics and Law Enforcement, B. Akhgar, D. Kavallieros, and E. Sdongos, Eds. Springer, 2021, pp. 73–95. [online]
- [20] N. Kolokotronis, K. Limniotis, and P. Rizomiliotis, "Applied cryptography," in *Information and Systems Security in Cyber-Space*, S. K. Katsikas, S. Gritzalis, and C. Lambrinoudakis, Eds. NewTech Publications, 2021, pp. 235–282. [online]
- [21] N. Kolokotronis, S. Shiaeles, E. Bellini, L. Charalambous, D. Kavallieros, O. Gkotsopoulou, C. Pavue, A. Bellini, and G. Sargsyan, "Cyber-Trust: The shield for IoT cyber-attacks," in *Resilience and Hybrid Threats*, NATO Science for Peace and Security Series D: Information and Communication Security, I. Linkov, L. Roslycky, and B. D. Trump, Eds. IOS Press, 2019, vol. 55, pp. 76–93, Research Article. [online]
- [22] K. Limniotis, N. Kolokotronis, and D. Kotanidis, "De Bruijn sequences and suffix arrays: analysis and constructions," in *Modern Discrete Mathematics and Analysis: With Applications in Cryptography, Information Systems, and Modelling*, N. J. Daras and T. M. Rassias, Eds. Springer, 2018, pp. 257–276. [online]

- [23] N. Kolokotronis and C. D. Koutras, "Zero knowledge proofs and applications," in *Modern Cryptography: Theory and Applications*, M. Burmester, S. Gritzalis, S. K. Katsikas, and V. Chrissikopoulos, Eds. Papasotiriou Pubs, 2011, pp. 635–646. [online]
- [24] N. Kolokotronis, "Stream ciphers," in *Modern Cryptography: Theory and Applications*, M. Burmester, S. Gritzalis, S. K. Katsikas, and V. Chrissikopoulos, Eds. Papasotiriou Pubs, 2011, pp. 299–354. [online]
- [25] N. Kolokotronis and K. Limniotis, "Algorithmic algebra," in *Modern Cryptography: Theory and Applications*, M. Burmester, S. Gritzalis, S. K. Katsikas, and V. Chrissikopoulos, Eds. Papasotiriou Pubs, 2011, pp. 47–87. [online]
- [26] N. Kolokotronis and C. D. Koutras, "Anonymity measures and privacy preservation techniques," in *Protecting Privacy in Information and Communication Technologies: Technical and Legal Issues*, C. Lambrinoudakis, L. Mitrou, S. Gritzalis, and S. K. Katsikas, Eds. Papasotiriou Pubs, 2010, pp. 123–145. [online]
- [27] E. Kofidis, N. Kolokotronis, A. Vassilarakou, S. Theodoridis, and D. Cavouras, "Medical image compression," in *Advanced Infrastructures for Future Healthcare*, Studies in Health Technology and Informatics, A. Marsh, L. Grandinetti, and T. Kauranne, Eds. IOS Press, 2000, vol. 79, pp. 369–406. [online]

Journals

- [28] S. Brotsis, K. P. Grammatikakis, D. Kavallieros, A. I. Mazilu, N. Kolokotronis, K. Limniotis, and C. Vassilakis, "Blockchain meets internet of things (IoT) forensics: A unified framework for iot ecosystems," *Internet of Things*, vol. 24, pp. 1–25, October 2023. [online]
- [29] P. Sotiropoulos, C.-M. Mathas, C. Vassilakis, and N. Kolokotronis, "A software vulnerability management framework for the minimization of system attack surface and risk," *Electronics*, vol. 12, no. 10, pp. 1–21, May 2023. [online]
- [30] G. Achilleos, K. Limniotis, and N. Kolokotronis, "Exploring the personal data processing in video conferencing apps," *Electronics*, vol. 12, no. 5, pp. 1–25, March 2023. [online]
- [31] G. Bendiab, A. Hameurlaine, G. Germanos, N. Kolokotronis, and S. Shiaeles, "Autonomous vehicles security: Challenges and solutions using blockchain and artificial intelligence," *IEEE Transactions on Intelligent Transportation Systems*, pp. 1–24, January 2023. [online]
- [32] I. Tzinos, K. Limniotis, and N. Kolokotronis, "Evaluating the performance of post-quantum secure algorithms in the TLS protocol," *Journal of Surveillance, Security and Safety*, vol. 3, pp. 101–127, September 2022. [online]
- [33] J. R. Rose, M. Swann, K. P. Grammatikakis, I. Koufos, G. Bendiab, S. Shiaeles, and N. Kolokotronis, "IDERES: Intrusion detection and response system using machine learning and attack graphs," *Journal of Systems Architecture*, vol. 131, pp. 1–12, October 2022. [online]
- [34] S. Monogios, K. Magos, K. Limniotis, N. Kolokotronis, and S. Shiaeles, "Privacy issues in Android applications: The cases of GPS navigators and fitness trackers," *International Journal of Electronic Governance*, vol. 14, no. 1/2, pp. 83–111, May 2022. [online]
- [35] C.-M. Mathas, C. Vassilakis, N. Kolokotronis, C. C. Zarakovitis, and M.-A. Kourtis, "On the design of IoT security: Analysis of software vulnerabilities for smart grids," *Energies*, vol. 14, no. 10, pp. 1–27, May 2021. [online]

- [36] S. Brotsis, K. Limniotis, G. Bendiab, N. Kolokotronis, and S. Shiaeles, "On the suitability of blockchain platforms for IoT applications: Architectures, security, privacy, and performance," *Computer Networks*, vol. 191, pp. 1–29, May 2021, 108005. [online]
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