

CALL FOR PAPERS

Workshop on: Chaos-based Data Protection; Data Security and Hiding in Multimedia Communications

CDP-DSHMC 2017

will be held in conjunction with

The 12th International Conference for Internet Technology and Secured Transactions (ICITST-2017)

<http://www.icitst.org/>

December 11-14, 2017, University of Cambridge, UK

Security and privacy are important issues in any society, especially in the digital society. In any public communication network, such as satellite, mobile-phone, and the Internet, it is almost impossible to prevent unauthorized people from eavesdropping. To make use of the already existed public communication networks and to maintain the secrecy and privacy, cryptographic techniques are applied. In particular, chaos-based information hiding and security have been widely used in Multimedia Communications (texts, images, videos, speech signal). The objective of this special session is to address the range of problems related to the security of information in Multimedia communications and to bring together researchers, practitioners and industrials interested by such questions. We will welcome papers both from theoretical and practical aspects. Prospective authors are invited to submit original, previously unpublished work, reporting on novel and significant research contributions, on-going research projects, experimental results and recent developments related to, but not limited, the following topics:

- Chaos-based Cryptography
- Chaos-based Data Hiding and Security
- Personal Cryptographic Security
- Cryptography
- Block Ciphers
- Stream Ciphers
- Data protection
- Pseudo chaotic number generation
- Pseudo random number generation
- Random number generation
- Steganography
- Watermarking
- Security methods for communications
- Data Integrity
- Database Security and Privacy
- E-business Security
- Iteration Theory
- Identification, Authentication and Non-repudiation
- Intellectual Property Protection
- Intrusion Detection & Prevention
- Lightweight cryptography for green computing
- Energy consumption of systems of communications
- Protocols for security
- Cryptanalysis
- Peer-to-Peer Security

- Protection in video
- Personal Data Protection for Information Systems
- Physical layer security for communications
- Wireless Network Security (Internet, WSNs, UMTS, WiFi, WiMAX, WiMedia and others)
- Security algorithms and applications
- Sensor and Mobile Ad Hoc Network Security
- Security and Privacy in Mobile Systems
- Service and Systems Design and QoS Network Security
- Security Information Systems Architecture and Design and Security Patterns
- Security and Privacy in Location-based Services
- Secure Cloud Computing
- Security and Privacy in Complex Systems
- Security and Privacy in Social Networks
- Security and privacy in vehicular networks
- Security and Privacy in Web Services
- Security in Distributed Systems
- Security Verification and Validation
- Software Security
- Surveys
- Standardization

Important Dates

See: <http://www.icitst.org/>

Paper Submission

Papers for the CDP-DSHMC 2017 should not exceed six pages and must follow the paper format specified by the ICITST-2017 guidelines.

Important

When you submit your paper, specify that: we want to submit this paper to Workshop on: Chaos-based Data Protection; Data Security and Hiding in Multimedia Communications and also send a copy to safwan.lassad@univ-nantes.fr

Session Co-organizers and contact

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Biography of co-organizers

Safwan El Assad (Associate Professor) received his PhD degree in electrical engineering from the University of Lille 1, France in 1987. His doctoral thesis was on electromagnetic compatibility. He joined the University of Nantes, France in September 1987, where he is now an Associate Professor. From 1988 to 1996, his main interest was in radar imaging, remote sensing, signal and images processing. From 1996 until 2002, he was interested in digital communications, adaptive equalization for digital channels by neural network, and e-learning. Now his current research is in chaos-based exchanged and stored information security, including: Chaos-based crypto and crypto-compression systems for secure transmitted and stocked data; chaos-based watermarking and steganography; Chaos-based keyed hash functions. He has graduated 11 PhDs and 20 Master students. He published (as an author, co-author) 3 patents, 34 international journals, 6 invited papers, 4 book-chapters and 125 articles in international conferences. He coordinated and participated in several French national, regional projects and European projects: coordinator of: RNRT "ACSCOM 2005-2009" (Contribution of the chaos in the security of the optical and mobile communication systems); Region/OSEO "ProtoGenSeq Feb 2013- Feb 2014" (Software prototype realization of the generator of chaotic sequences); partner of: AtlanStic CNRS FR 2819 "SeChaos: Mai 2011- Octobre 2013" (Exchanged information security based on the chaotic sequences); CEDRE "GreenEmbedded Jan 2011- Jan 2012" (Optimal management of the renewable energy for a green computing in the embedded systems); European Celtic-Plus "4KREPROSYS 2015-2017" (4K ultraHD TV wireless REMote PROduction SYStems). He co-organized and co-chaired 8 workshops and special sessions on chaos-based data hiding and security and he chaired 27 sessions on information security. Applications: Transactions Security: IoT security, IP over satellite DVB, UMTS, UWB, WIFI security, wireless network security, video security, copyright, data integrity, etc.

Charles Shoniregun

Charles A. SHONIREGUN is a Professor of Applied Internet Security and Information Systems, Founder of Infonomics Society. He has degrees (BSc (HONS), MSc, PGCLTHE, and PhD) from the University of East London in UK, served as a member of the research committee at the School of Computing Information Technology and Engineering (CITE), and taught in many universities and colleges abroad. Professor Shoniregun was an elected member of the University of East London Academic Board, and a professional member of the British Computer Society (MBCS), Chartered Engineer (CEng), Chartered IT Professional (CITP), Information Risk Management and Audit (IRMA), Association for Computing Machinery (ACM), IEEE Senior Member and Ex-Chair of IEEE UK/RI Professional Activities, Executive Committee Member of IEEE UK and RI Computer Society Chapter, IEEE Task Force on E-commerce, IEEE Technical Committee, Fellow of The Higher Education Academy (FHEA), Fellow of the Institution of Analysts and Programmers (FIAP) and Fellow of the Royal Society for the encouragement of Arts, Manufacturers and Commerce (FRSA). He has also undertaken consultancy for various industrial sectors at the global platform and has over 15 years experience in the telecommunications industry. Professor Shoniregun is an invited speaker to NATO, guest speaker to many universities in the UK and abroad on issues relating to his research and consultancy area, and has several times won the IEEE Certificate of Appreciation. In 2008, he was invited speaker at the Joint C2 Capabilities Conference organized for the senior military and US government personnel in Washington DC. His research interests are in the fields of Internet security, Cyber Terrorism, risks assessment of technology-enabled information, electronic and mobile commerce (emC), second-life applications, third-stream activities, telecommunications and applied information systems. He is a committee member of the Harvard Research Consortium and Global Seminars (Harvard University), Editor-in-Chief and Consulting Editor to many international journals, author, co-author, adjunct and distinguished visiting professor in "Applied Internet Security and Information Systems", External Assessor to many Universities, Consultant to private and public sectors.

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