CURRICULUM VITAE Yannis C. Stamatiou

November 28, 2018

Personal Info

Name:	Yannis
Surname:	Stamatiou
Parents' names:	Costas and Maria
Born:	17 January 1968 in Volos, Greece
Nationality:	Greek
Address:	University of Patras, Rio, Patras, Greece
	Dept. of Business Administration
Phone:	(+30) 26340 32 476 (home)
email:	stamatiu@ceid.upatras.gr

Professional status

He is currently Professor at the Department of Business Administration, University of Patras, Greece. He is also consultant on privacy and ICT security matters at the Computer Technology Institute and Press - "Diophantus", Patras, Greece.

From March 2015 to July 2015 he was on Sabbatical Leave at the Department of Business Informatics, Faculty of Economics and Business Administration, Goethe University, Frankfurt, Germany. His research activities during his leave were focused on PETs (Privacy Enhancing Technologies) and the Privacy-ABCs technology.

Education

He graduated from the University of Patras, Department of Computer Engineering and Informatics, with a grade of 8.86/10 (June 1990). In June 1991, he started graduate studies at the same department under a government scholarship, working towards a PhD in Parallel Computation and Parallel Complexity Theory, which he completed in December 1997. In 1999, he received a Certificate of Postgraduate Studies on *Open and Distant Learning Educational Systems* from the Greek Open University with a grade of 9.10/10.

Diploma thesis

His diploma thesis was completed in 1990 under the supervision of Professor Athanasios Tsakalidis and it was titled *Top-down Rebalancing of Red-Black Trees and their Behaviour in Parallel Processing Environments.*

Doctoral thesis

In December 1997 he successfully defended his doctoral thesis that was completed under the supervision of Professor Lefteris Kirousis and it was titled *Theory and Applications of the Constraint Satisfaction Problem: Distributed Environment-Parallel and Randomized Algorithms-Nonmonotonic Reasoning.* In February 1998 he successfully defended his thesis and was awarded the PhD degree.

Postdoctoral fellowship

From September 1998 to September 1999 he was a postdoctoral fellow at the Computer Science Department of Carleton University, Ottawa, in Canada. He was jointly supported by the Greek Ministry of National Economy through a NATO scholarship for conducting postdoctoral studies (contract number 106384/ Δ OO 1222/2-7-98) and the MITACS project CANCCOM (Complex Adaptive Networks for Computing and Communication). During his stay he conducted research work and taught two courses on Systems Programming using C++.

R&D projects with major participation

- SAINT (Systemic Analyzer in Network Threats) (HORIZON 2020, From May 2017 to April 2019) https://project-saint.eu/: SAINT proposes to analyse and identify incentives to improve levels of collaboration between cooperative and regulatory approaches to information sharing. Analysis of the ecosystems of cybercriminal activity, associated markets and revenues will drive the development of a framework of business models appropriate for the fighting of cybercrime.
- EU project Privacy Flag (HORIZON 2020). (From April 2015 to April 2018.) This project will investigate and take advantage of the potential of crowdsourcing, ICT technologies and legal expertise in order to protect citizens privacy when visiting websites, using smartphone applications, or roaming in a smart city. It will enable citizens to monitor and control their privacy through a user friendly solution made available as a smart phone application, a web browser add-on, and a public website.
- EU project IoT Lab (FP7). (From October 2013 to September 2016.) IoT Lab is a European Research project which aims at investigating and exploiting the potential of crowdsourcing and the Internet of things for multidisciplinary research and experiments based on end-users' interactions and mobile devices (and sensors). IoT Lab is offering a platform bringing together citizens, end-users and researchers to work together and to address real challenges by joining the forces of the research community and the wisdom of the crowd. The project pays particular attention to protecting the privacy and data of participating users by implemented suitable privacy preserving authentication mechanisms and data encryption algorithms.
- IST IP project "ABC4Trust" Attribute Based Credentials for Trust (2010 to 2005, 10MEuro). ABC4Trust (https://abc4trust.eu/) addresses the federation and interoperability of existing technologies that support trustworthy and privacy-preserving authentication, based on Attribute Based Credentials. The project brings together, among other partners, IBM with its Idemix authentication system, and Microsoft Research, with its U-prove authentication platform. The project will integrate and harmonize these two technologies into a single privacy preserving authentication platform that also includes secure hardware devices such as smart cards, for increased security. CTI, as a member of the ABC4Trust consortium, will lead one of the two ABC4Trust platform evaluation pilots. Mr. Stamatiou is responsible for organizing the pilot, developing the necessary Identity Management System that will be employed in the pilot, installing the combined Idemix and U-prove identity management systems on the pilot platform and evaluating the pilot results giving feedback to other consortium partners.

- Short term research project titled "Dynamically Reconfigurable block ciphers through parallel substitution box construction" (from September 8 to September 20, 2008, 4KEuro). This short-term research project was conducted at the premises of the Barcelona Supercomputing Center (BSC), who is a member of the European Agency HPC-Europa on High Performance Computing. The projects objective was the development of parallel algorithms for the design of s-boxes with high nonlinearity for use in block ciphers. The algorithms implementation was based on the MPICH library on the parallel computer BSC MareNostrum (10240 processing cores, BladeCenter JS21 Cluster, PPC 970, 2.3 GHz, Myrinet).
- Regional Innovation Pole of Western Greece (from 2007 to 2008, 200KEuro). The Regional Innovation Pole of Western Greece was an association of public and private sector organizations whose goal is to develop, promote and exploit innovation efforts in Western Greece (RWG). A key objective was to organize and strengthen the links between the Research /Technology Institutes with Business Organizations for setting up the framework towards the enhancement of the technological and innovation achievenements of the Region. Mr. Stamatiou participated as a principal investigator on the fourth line of research, targeted at the Security of Information Systems and Networks. He directed the research efforts in the fields of cryptography and ICT security and participated in the efforts for the implementation of security procedures towards the support of the safe operation of businesses and organizations.
- Electronic voting system PNYKA (http://www.pnyka.cti.gr, from 2006 to 2008, 250KEuro). This R&D project, funded by the General Secretariat for Research and Technology, was implemented by the Research Computer Technology Institute & Press ("Diophantus") in collaboration with the private company EXPERTNET. The aim was to design and implement an integrated system for the support of electronic voting via the Internet, with emphasis on protecting the privacy of citizens. To maximize the degree of protection of voter privacy, the system incorporates many technological innovations, such as fully distributed architecture, homomorphic encryption and tallying schemes, group threshold cryptographic protocols for the voting authorities, and embedded hardware for storing election keys. It was developed entirely with open source tools so as to facilitate public scrutiny and verifiability. The PNYKA system was awarded the first prize in the eVoting competition organized by the Competence Center for Electronic Voting and Participation (http://www.e-voting-competition.at/) sponsored by the Austrian agency Internet Foundation Austria (IFA). Mr. Stamatiou designed and implemented all the security sensitive protocols of the system and conducted the formal risk analysis of its components based on the CORAS risk analysis framework. Also, Mr. Stamatiou presented the system at the eVoting competition in Austria.
- Scientific Consultant of EXPERTNET SA (from 2004 to 2007, total project budget about 1MEuro). Mr. Stamatiou served as scientific consultant to EXPERNET SA during the companys participation to four projects related to security of information systems and eGovernment: (i) IST STREP project e-Mayor. The aim of the project was to create an integrated platform for the support of online operations of town halls (at a panEuropean level) and the support of secure exchange of documents among them (using appropriate cryptographic techniques, and Public Key Infrastructures PKIs for authentication of the documents). (ii) IST eTen project Selis. This project was aimed at implementing a platform for the secure management of electronic invoices, based on Public Key Infrastructures

and appropriate cryptographic protocols. (iii) IST IP project Intelcities. The aim of the project was to create an open system, called e-city Platform, for the support of eGovernanve operations with interoperability capabilities. (iv) Project, supported by GSRT, Bioathletics. This work was aimed at creating a biometric system to authenticate people entering sports facilities.

- Design and development of cryptographic protocols for cryptographically secure sequences of random numbers for the EXTRA 5 and SUPER 3 OPAP lottery games (from 2001 to 2002, 100KEuro). In this work, Mr. Stamatiou designed the software and hardware architecture of a system whos aim was to produce cryptographically secure (in a complexity theoretical sense) for the new games of OPAP named EXTRA 5 and SUPER 3. Additionally, implemented the most critical parts of the cryptographic system and managed the development team of CTI who performed the final integration. The system designed and implemented by Mr. Stamatiou contained the following main parts: (i) Three true random number generators based on physical sources (shot-noise in zener diodes, thermal noise across resistors, and a software-based one exploiting the randomness in the phase difference between two clock sources in the motherboard of a personal computer). These three generators were used for seeding the cryptographically secure software generators. (ii) Two cryptographically secure pseudorandom number generators, BBS and RSA, and two generators based on suitably modified block ciphers (DES and CAST-128). (iii) Knuth's M and B algorithms for combining the outputs of the cryptographically secure generators in order to amplify their randomness.
- IST STREP project ASPIS (from 2000 to 2002, 500KEuro). This project aimed at producing an integrated CD/DVD-ROM copy protection platform which includes mechanisms for secure physical protection from CD/DVD-ROM copying as well as content protection (during storage and transport). Mr. Stamatiou and his group at CTI had undertaken the tasks of the encryption/decryption of CD/DVD-ROM contents using dynamically modifiable Feistel-based ciphers (mainly CAST-128), the watermarking of digital audio files (audio watermarking) and the creation of software libraries for the support of public key cryptography and corresponding cryptanalysis based on elliptic curves (for building secure e-commerce applications). Mr. Stamatiou designed and implemented the data encryption/decryption dynamically modifiable ciphers using Bent Boolean functions for the cipher sBoxes, With regard to audio file watermarking, Mr. Stamatiou designed and implemented watermark format and the embedding/extracting process. The resulting watermarking scheme was based on computationally intractable problems and the theory of threshold phenomena in them. In this scheme watermarks were seen as graphs within the context of the 3-COLORING problem generate around the "hard", region of the critical edge to node ratio having a specific coloring only known to the legitimate owner of the audio file. Knowledge of the coloring (based on Zero Knowledge Interactive Protocols) implies ownership of the audio file, due to the intractability of discovering a 3-COLORING in a graph generated around the "hard" region. Finally, Mr. Stamatiou was involved in the design and implementation of ECC-LIB which is a software library (in C++) that supports algebraic operations and a rich variety of cryptographic protocols for Elliptic Curve Cryptography in fields of the form Fp, with p an odd prime, based on the Complex Multiplication method.
- IST STREP project "CORAS" (from 2000 to 2003, 1MEuro). This project aimed to develop and evaluate an integrated platform for risk analysis and management in security

critical applications (e.g. in ecommerce and telemedicine applications). The methodology is based on formal and semiformal modeling methodologies that can facilitate the risk analysis process from the design to the implementation of the system. Mr. Stamatiou, leading the CTI team, along with two other project partners (the Institute for Research and Technology (FORTH) in Heraklion, Crete, and NCT-National Centre for Telemedicine in Norway), designed and managed the CORAS platform evaluation pilots targeted at the analysis of the network-based telemedicine application HYGEIANET developed by FORTH, which linked through a telecommunications infrastructure the hospitals and health centers throughout Crete. The pilots focused on producing risk models (using variations of the UML Universal Modeling Language) for the targeted applications. The models were produced and analyzed using the methodology of the project and the results were reported and analyzed by the doctors at the University Hospital at Heraklion in Crete.

Design and Implementation of a statistical framework for risk management in forecast betting games (from 2000 to 2002, 100KEuro). In this project, the goal of CTI was to design and implement a multifunctional software for the risk management of fixed odds, forecast betting games (e.g. with football matches) for exploitation by Intralot. This software was able to identify riskysituations (e.g. sudden increase of bets placed on an indifferent football match) that may lead the betting company to have significant financial damages. Mr. Stamatiou was the principal designer of the software and, additionally, implemented himself the critical games database (based on the B+ tree data structure) for the collection and quick retrieval of game related information. The software was implemented using the C++ Builder Enterprise 4.0 of Borland in the WINDOWS NT operating system. Moreover, Mr. Stamatiou designed and implemented suitable statistical tests (based on hypothesis testing) for optimizing risk management results as well as aiding the bookmaker in understanding the betting behavior of players, based on what-if scenarios (both on-lined and off-line in previous betting competitions stored on B+ trees).

Invitations for research presentation

- Invited speaker at PI4EST, the 8th International Summer School on Privacy and Identity Management for Emerging Services and Technologies. This Summer School is hosted by PI.lab in Nijmegen, the Netherlands on 17-21 June 2013.
- Invited speaker for presentation and demo of the ABC4Trust pilot application focused on the privacy presercing remote course evaluation application for higher education institutes. Invited at CYBER SECURITY & PRIVACY EU FORUM 2013 (CSP EU FORUM), Brussels: 18-19 April, 2013.
- Invited speaker at 6th Panhellenic Conference on Informatics with international participation (PCI 2012) with a talk titled *Privacy by Design* wth emphasis on Attribute Based Credentials and their applications.
- December 1993: Visitor at the university of Karlsruhe, Germany, for a week. He presented his research work on Constraint Satisfaction Problems.
- December 1996: Visitor at Max-Planck-Institute für Informatik, Germany, for 10 days. He presented his research work on the computational complexity of solving in parallel Constraint Satisfaction Problems as well as his work on partiality schemes for enforcing local consistency.

- July 2001: Invited speaker at the *Third Panhellenic Logic Symposium* in Anogia, Crete, for a talk on the *Constraint Satisfaction Problem*, its theoretical aspects and its applications in various scientific disciplines.
- August 2002: Invited speaker at workshop *Random Structures* that was organized at the Isaac Newton Institute for Mathematical Sciences, Cambridge, with talk's subject the preservation of randomness in algorithms handling random combinatorial structures.
- 2002: Invited speaker at the University of Liverpool, Dept. of Computer Science, for a talk on threshold phenomena in Computer Science and Physics.
- Invited speaker at the 1st AIT Annual Workshop on PRactical AspeCts of SEcurity -PRACSE 2006 Athens Information Technology (AIT) center in Athens from 16/6/2006 to 17/6/2006. The titles of the talks were:
 - AUTHENTICATION PROTOCOLS: Notions of Authentication, Basic techniques and Typical Attacks.
 - EVALUATION OF REAL WORLD PROTOCOL STANDARDS: IPSec, SSH, SSL, Kerberos.

Book chapters

- A.D. Avgerou, D. Karagianni, and Y.C. Stamatiou. mMarketing Opportunities for User Collaborative Environments in Smart Cities. To appear in collective volume titled *Mobile Platforms, Design, and Apps for Social Commerce*, IGI Global, edited by Dr. Jean-Eric Pelet. Expected in 2017.
- C. Katsimpiri, P.E. Nastou, P.M. Pardalos, and Y.C. Stamatiou. The Ubiquitous Lambert Function and its Classes in Sciences and Engineering. In *P.M. Pardalos and T.M. Rassias (eds.) Contributions in Mathematics and Engineering, In Honor of Constantin Carathéodory.* Springer, Expected in 2016.
- P.E. Nastou, D. Nastouli, P.M. Pardalos, and Y.C. Stamatiou. A Method for Creating Private and Anonymous Digital Territories using Attribute-Based Credential Technologies. In N. Darras and M.T. Rassias (eds.) Computation, Cryptography, and Network Security, pp. 399-412, Springer 2015.
- P.E. Nastou, P. Pardalos, P. Spirakis, and Y.C. Stamatiou. On the Design of Agent Agreement Protocol Using Linear Error-Correcting Codes. Chapter in book titled *Applications* of *Mathematics and Informatics to Science and Engineering*, Series: Springer Optimization and Its Applications, Vol. 91, Springer-Verlag, 2014.
- E. Konstantinou, P. Nastou, Y. Stamatiou, C. Zaroliagis, Securing Embedded Computing Systems through Elliptic Curve Cryptography, Encyclopedia of Embedded Computing Systems, Mohamed Khalgui, Olfa Mosbahi, Antonio Valentini, (eds), 2012, IGI Global, (to appear).
- P. Nastou, P. Spirakis, and Y.C. Stamatiou, *Prime numbers, discrete logarithms and factorization: Theory and Algorithms*, chapter in the Greek language in a volume titles *Modern Cryptography: Theory and Applications*, edited by Mike Burmester, Stafano Gritzali, Socrates Katsika, and Vasileio Chrysikopoulo, Papasotiriou, 2010.

- P. Kammas, T. Komninos, P. Spirakis, Y.C. Stamatiou, and H. Tsaknakis, *Worm propagation models in Networks: theory and analysis*, In (forthcoming): Pichappan, P. (ed.), Handbook of Research on Threat Management and Information Security: Models for Countering Attacks, Breaches and Intrusions, IGI Global.
- C. Manolopoulos, D. Sofotassios, P. Spirakis, and Y.C. Stamatiou. Privacy protection in eVoting. Invited chapter in the Greek language in a volume titled *Privacy Protection in Information and Communication Technologies: Technical and Legislation issues*, 2009.
- E. Makri and Y.C. Stamatiou, *Deterministic and randomized key pre-distribution schemes for mobile ad-hoc networks: foundations and example constructions*, to appear in a book dedicated to security issues in mobile networks to be published by Nova Science Publishers in 2008.
- E.C. Laskari, G.C. Meletiou, Y.C. Stamatiou, and M.N. Vrahatis, *Cryptography and Cryptanalysis through Computational Intelligence*, to be included in a book title *Computational Intelligence in Information Assurance and Security*", to be bublished by Nova Science Publishers.
- D. Koukopoulos and Y.C. Stamatiou, *Digital Audio Watermarking Techniques for MP3 Audio Files*, to be included in a book titled "Digital Audio Watermarking Techniques and Technologies: Applications and Benchmarking", to be published by Idea Group in 2007.
- P.E. Nastou and Y.C. Stamatiou, An on chip, CAST-128 based block cipher with dynamically reconfigurable s-boxes generated in parallel. It will appear in 2004 as a chapter in a book dedicated to Embedded Cryptographic Hardware, published by Nova Science Publishers, NY, USA.
- Ketil Stølen, Folker den Braber, Theo Dimitrakos, Rune Fredriksen, Bjørn Axel Gran, Siv-Hilde Houmb, Yannis C. Stamatiou, and Jan Øyvind Aagedal, Model-based risk assessment in a component-based software engineering process-using the CORAS approach to identify security risks, Chapter 11 in: Business CBSE (Component-Based Software Engineering), to be published by Kluwer Academic Publishers, 2002
- B.B. Boutsinas, Y.C. Stamatiou, and G. Pavlides, *Massively Parallel Support for Non*monotonic Reasoning, Parallel Processing for AI 3, James Geller, Hiroaki Kitano and Christian Suttner (eds.), Elsevier Publishers, pages 41–66, 1997.

Textbooks

- 1. P. Nastou, P. Spirakis, and Y.C. Stamatiou, *Modern cryptography: a leisurely walk*, to be published by CTI-Press, 2003. (In the Greek language.)
- 2. C. Bouras, L.M. Kirousis, P. Spirakis, and Y.C. Stamatiou, *Introduction to Graphs: The*ory, problems and solutions, published by GUTENBERG Publications in the Greek language, ISBN 960-01-0815-3, 1999. (In the Greek language.)

Notes for international scientific schools

Yannis Stamatiou, Threshold Phenomena: The Computer Scientist's Point of View, for a course offered taught by himself in The LOGIC AND INTERACTION Programme, 28 January–1 March 2002, that takes place in Marseille, France, coorganized by the Institut de Mathematiques de Luminy (IML) and the Laboratoire d'Informatique Fondamentale de Marseille (LIF).

Publications in international refereed journals¹

- N. Giovanopoulos, P.E. Nastou, P.M. Pardalos, and Y.C. Stamatiou. A Secret Key Information Hiding in Digital Images Protocol based on Steganographic Methods in Image Frequency Domain. To appear at International Journal of Applied & Experimental Mathematics, Graphy Publications, 2017.
- A.D. Avgerou, P. Nastou, D. Nastouli, P. Pardalos and Y.C. Stamatiou. On the Deployment of Citizens' Privacy Preserving Collective Intelligent eBusiness Models in Smart Cities. *International Journal of Security and Its Applications (IJSIA)*, Vol. 10, No 2, pp. 171-184, February 2016.
- 3. A.D. Avgerou and Y.C. Stamatiou. Privacy Awareness Diffusion in Social Networks. *IEEE Security & Privacy Journal*, vol.13, no. 6, pp. 44-50, Nov.-Dec. 2015. Also posted at http://stc-social-networking.ieee.net/featured-articles, at the site of the Special Technical Community (STC) on Social Networking, as a featured article for December 2015, selected by the editorial board as "interesting and promising" (as stated at the site) article.
- P.E. Nastou, V. Papadinas, P. Pardalos, and Y.C. Stamatiou. On a new edge function on complete weighted graphs and its application for locating Hamiltonian cycles of small weight. *Optimization Letters*, pp. 1-18, Springer, 2015.
- C. Manolopoulos, D. Sofotassios, P. Spirakis, and Y.C. Stamatiou. A Framework for Protecting Voters' Privacy in Electronic Voting Procedures. *Journal of Cases on Information Technology (JCIT)*, Vol. 15, No. 2, pp. 1-33, 2013.
- P.E. Nastou, P. Spirakis, Y.C. Stamatiou and A. Tsiakalos. On the Derivation of a Closed-Form Expression for the Solutions of Generalized Abel Differential Equations. *International Journal of Differential Equations*, Hindawi Press, Volume 2013, June 2013.
- 7. P.E. Nastou and Y.C. Stamatiou. Distributed Computation of SBoxes with Strong Security Properties. *International Journal of Security and Its Applications*, Vol. 6, No. 2, 2012.
- P. Nastou, Y.C. Stamatiou, and A. Tsiakalos. Solving a Class of ODEs Arising in the Analysis of a Computer Security Process using Generalized Hyper-Lambert Functions. *International Journal of Applied Mathematics and Computation*, Vol 4 No. 3, pp. 67-76, 2012.
- H. Antonopoulou, N. Glinos, and Y. C. Stamatiou. An identity derived from the solution of a class of differential equations for the evolution of a key agreement protocol. *Journal* of Discrete Mathematical Sciences & Cryptography, Taylor & Francis Group and TARU publications, Vol 14, No. 6, pp. 515520, 2011.
- P. Kammas, C. Manolopoulos, and Y.C. Stamatiou, Modelling of Long Term Viability of Financial Agents Based on their Short Range Economic Behaviour. Global Business & Economics Anthology Volume II, Issue 1, pp. 159-171, December 2011.

 $^{^{1}}$ Except the publication with V. Boutsinas and G. Pavlides, he has participated only in publications where coauthors' names are listed in alphabetical order.

- D. Kalles, A. Papagelis, Y.C. Stamatiou: Consolidating a Heuristic for Incremental Decision Tree Learning through asymptotic Analysis. International Journal on Artificial Intelligence Tools 20(1): 29-52 (2011).
- P. Kammas, T. Komninos, and Y.C. Stamatiou, Queuing theory based models for studying intrusion evolution and elimination in computer networks, Journal of Information Assurance and Security (JIAS), Special Issue on Intrusion and Malware Detection, Volume 4, Issue 3, pp. 200-208, June 2009.
- 13. E. Konstantinou, A. Kontogeorgis, Y.C. Stamatiou, and C.D. Zaroliagis: On the Efficient Generation of Prime-Order Elliptic Curves. *Journal of Cryptology* 23(3): 477-503 (2010).
- E. Makri and Y.C. Stamatiou. An Interactive, Similarity Increasing Algorithm for Random Strings with Applications to Key Agreement in ad hoc Networks. *Studies in Applied Mathematics*. Vol. 121, No. 2, pp. 141-155, 2008.
- N. Glinos and Y.C. Stamatiou. On the equivalence between random graph models. Journal of Discrete Mathematical Science & Cryptography, Vol. 11, No. 4, pp. 405-419, Taylor & Francis Group and TARU publications, 2008.
- A.C. Kaporis, L.M. Kirousis, Y.C. Stamatiou, M. Vamvakari, and M. Zito, The unsatisfiability threshold revisited, *Discrete Applied Mathematics*, Vol. 155, pp. 1525-1538, Elsevier, 2007.
- E.C. Laskari, G.C. Meletiou, Y.C. Stamatiou, and M.N. Vrahatis. Cryptography and Cryptanalysis Through Computational Intelligence. Studies in Computational Intelligence (SCI), Vol. 57, Springer-Verlag, pp. 149, 2007.
- 18. E. Konstantinou, Y.C. Stamatiou, and C. Zaroliagis, Efficient generation of secure elliptic curves, *International Journal of Information Security*, 6(1): 47-63, 2007.
- E.C. Laskari, G.C. Meletiou, Y.C. Stamatiou, D.K. Tasoulis, and M.N. Vrahatis, Assessing the Effectiveness of Artificial Neural Networks on Problems Related to Elliptic Curve Cryptography, Mathematical and Computer Modelling, Volume 46, Issues 1-2, 174-179, Elsevier, 2007.
- 20. E.C. Laskari, G.C. Meletiou, Y.C. Stamatiou, and M.N. Vrahatis, Applying evolutionary computation methods for the cryptanalysis of Feistel ciphers, *Applied Mathematics and Computation* 184(1): 63-72, Elsevier, 2007.
- T. Komninos, P. Spirakis, Y.C. Stamatiou, G. Vavitsas. A worm propagation model based on scale free network structures and people's email acquaintance profiles. *IJCSNS - International Journal of Computer Science and Network Security*, Vol. 7 No. 2 pp. 308-315, 2007.
- 22. S. Antonopoulou, Y.C. Stamatiou, and M. Vamvakari. An asymptotic expansion for the q-binomial series using singularity analysis for generating functions. *Journal of Discrete Mathematical Sciences & Cryptography*, Vol. 10, No. 3, pp. 313-328, 2007.
- 23. L.M. Kirousis, Y.C. Stamatiou, and M. Zito, The unsatisfiability threshold conjecture: the techniques behind upper bound improvements, *Computational Complexity and Statistical Physics*, Oxford University, pages 159-178, 2006.

- A. Kaporis, L. Kirousis, and Y.C. Stamatiou, Proving conditional randomness using the Principle of Deferred Decisions, *Computational Complexity and Statistical Physics*, Oxford University Press, New York, 179-194, 2006.
- E.C. Laskari, G.C. Meletiou, Y.C. Stamatiou and M.N. Vrahatis, Evolutionary computation based cryptanalysis: A first study, *Journal of Nonlinear Analysis: Theory, Methods* & Applications, Volume 63, Issues 5-7, e823-e830, Elsevier, 2005.
- D. Koukopoulos and Y.C. Stamatiou, A Watermarking Scheme for MP3 Audio Files, International Journal of Signal Processing (IJSP), Vol. 2, No. 3, pp. 206-213, 2005.
- P.E. Nastou and Y.C. Stamatiou, An on chip, CAST-128 based block cipher with dynamically reconfigurable s-boxes generated in parallel. Volume on *Embedded Cryptographic Hardware: Methodologies & Architectures*, Nova Publishers, 135-152, 2004.
- L.M. Kirousis, E. Kranakis, D. Krizanc, and Y.C. Stamatiou, Locating Information with Uncertainty in Fully Interconnected Networks: The Case of Non-Distributed Memory, *NETWORKS* 42, Issue 3, 169-180, 2003.
- 29. Y.C. Stamatiou, Threshold Phenomena: The Computer Scientist's Viewpoint, EATCS (European Association of Theoretical Computer Science) Bulletin 80, 199-234, June 2003.
- S. Armeni, D. Christodoulakis, I. Kostopoulos, Y.C. Stamatiou, and M. Xenos, Secure information hiding based on computationally intractable problems. *Journal of Discrete Mathematical Sciences & Cryptography* Vol. 6, No. 1, 21-33, April 2003.
- D. Achlioptas, L.M. Kirousis, E. Kranakis, D. Krizanc, M. S.O. Molloy, and Y.C. Stamatiou, Random Constraint Satisfaction: A More Accurate Picture, *Constraints* 6, 329-344, 2001.
- 32. L.M. Kirousis, Y.C. Stamatiou, and M. Vamvakari, Upper Bounds and Asymptotics for the *q*-binomial Coefficients, *Studies in Applied Mathematics* **107**, 43-62, 2001.
- A.C. Kaporis, L.M. Kirousis, E. Kranakis, D. Krizanc, Y.C. Stamatiou and E.C. Stavropoulos, Locating Information with Uncertainty in Fully Interconnected Networks with Applications to World Wide Web Information Retrieval, *Computer Journal* 44, 221-229, 2001.
- 34. N.D. Dendris, L.M. Kirousis, Y.C. Stamatiou, and D.M. Thilikos, On Parallel Partial Solutions and Approximation Schemes for Local Consistency in Networks of Constraints, *Constraints* 5, 251-273, 2000.
- S. Janson, Y.C. Stamatiou, and M. Vamvakari, Bounding the Unsatisfiability Threshold of Random 3-SAT, *Random Structures and Algorithms* 17, 103-116, 2000.
- 36. A.C. Kaporis, L.M. Kirousis, and Y.C. Stamatiou, A note on the non-colorability threshold of a random graph, *Electronic Journal of Combinatorics* 7, #R29, 2000.
- Y.C. Stamatiou, Phase Transitions in Mathematics and in Physics: Two Faces of the same coin?, Carleton Journal of Computer Science 3, 57-69, 1999.
- L.M. Kirousis, E. Kranakis, D. Krizanc, and Y.C. Stamatiou, Approximating the Unsatisfiability Threshold of Random Formulas, *Random Structures and Algorithms* 12, 253-269, 1998.

Publications in refereed conferences

- J. Bothos. A. Zalonis, V. Vlachos, Y. Stamatiou, A. Madhja, S. Thomopoulos, and S. Nikoletseas. Probing Digital Black Markets: A New Approach to Cybersecurity. In Proc. 4th International Conference on Operation Planning, Technological Innovations and Mathematical Applications (OPTIMA), 2017.
- Vasileios Vlachos, Yannis C. Stamatiou, Adelina Madhja, Sotiris E. Nikoletseas: Privacy Flag: A crowdsourcing platform for reporting and managing privacy and security risks. PCI 2017: 27:1-27:4
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Other contributions

He is contributing with Prof. P. Spirakis and Dr. P. Nastou to a monthly column of the greek magazine "Defense and Diplomacy" devoted to cryptography and cryptanalysis.