

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name (Surname, First name)	DR. MANIFAVAS, CHARALAMPOS (HARRY)
Address	Ieroloxiton 8, 71305 Heraklion, Crete
Telephone	+30 6944 620121
E-mail	harryman@epp.teicrete.gr , harryman@otenet.gr
Nationality	Greek / British
Date of birth	07.12.1968
Gender	Male

EDUCATION

- Dates (from – to) October 1995 to May 2000
- Name and type of organisation providing education and training University of Cambridge, Cambridge, United Kingdom
<http://www.cl.cam.ac.uk/research/security/>
- Principal subjects/occupational skills covered Thesis title: 'Micropayment Transaction Costs'
 - Secure Electronic Payment Protocols
 - Public Key Infrastructures
 - Authentication Protocols
 - Intellectual Property Protection
- Title of qualification awarded Ph.D. Computer Security

- Dates (from – to) September 1993 to October 1994
- Name and type of organisation providing education and training University of Kent, Canterbury, United Kingdom
<http://www.ee.kent.ac.uk/department/>
- Principal subjects/occupational skills covered Thesis title: 'Analysis, Modelling and Implementation of a VBR Video Traffic for ATM Networks'
 - Information Theory, Coding and Digital Signal Processing
 - Computer, Satellite, Microwave and Optical Communication Networks
- Title of qualification awarded M.Sc. Communication Systems Engineering

- Dates (from – to) September 1986 to June 1993
- Name and type of organisation providing education and training University of Crete, Heraklion, Crete, Greece
<http://www.csd.uoc.gr/>
- Principal subjects/occupational skills covered
 - Computer Networks, Network Management
 - Operating Systems, Computer Programming
- Title of qualification awarded B.Sc. Computer Science (2.1 Hons)

TEACHNING EXPERIENCE

- Dates (from – to) May 2008 onwards
- Name and address of employer Technological Educational Institute of Crete
Applied Information Technology and Multimedia Dept.,
Heraklion, Crete, Greece
<http://www.epp.teicrete.gr/>
- Type of business or sector Education
- Occupation or position held Assistant Professor
- Main activities and responsibilities Teaching:
 - Information Systems Security
 - Network Security
 - Operating Systems
 - Distributed Systems

- Dates (from – to) September 2005 – February 2011 (6 Fall Terms)
- Name and address of employer University of Crete
Computer Science Dept.
Heraklion, Crete, Greece
<http://www.csd.uoc.gr/>
- Type of business or sector Education
- Occupation or position held Visiting Assistant Professor
- Main activities and responsibilities Teaching:
 - Information Systems Security (at postgraduate & advanced undergraduate level)
<http://www.csd.uoc.gr/~hy457/>

- Dates (from – to) March 2008 – August 2008
- Name and address of employer Technical University of Crete
Electronic & Computer Engineering Dept.
Chania, Crete, Greece
<http://www.tuc.gr/hmmy-deparment.html>
- Type of business or sector Education
- Occupation or position held Visiting Assistant Professor
- Main activities and responsibilities Teaching:
 - Information Systems Security

- Dates (from – to) September 2004 – April 2008
- Name and address of employer Technological Educational Institute of Crete
Applied Information Technology and Multimedia Dept.
Heraklion, Crete, Greece
- Type of business or sector Education
- Occupation or position held Visiting Assistant Professor
- Main activities and responsibilities Teaching:
 - Information Systems Security
 - Operating Systems
 - Distributed Systems

WORK / RESEARCH EXPERIENCE

- Dates (from – to) May 2011 – April 2014
- Name and address of employer Telecommunication Systems Institute (TSI), Technical University of Crete (TUC)
<http://www.tsi.gr/index.en.html>
- Type of business or sector Research & Development
- Occupation or position held Senior Researcher
- Main activities and responsibilities FP7, JTI-CP-ARTEMIS Joint Technology Initiatives - Collaborative Project (ARTEMIS) nSHIELD, New embedded Systems architecture for multi-Layer Dependable solutions

- Dates (from – to) June 2007 – March 2008
- Name and address of employer Institute of Computer Science, Foundation of Research & Technology – Hellas
N. Plastira 100, Vassilika Vouton, GR-70013 Heraklion, Crete
<http://ics.forth.gr/>
- Type of business or sector Research & Development
- Occupation or position held ICT Security Engineer & Consultant
- Main activities and responsibilities Promoting best practices, risk assessment and risk management.
I was involved in the following projects
 - FORTHcert CSIRT: Participated in the design and implementation of a function to offer the external IT community Computer Security Incident Response Services
<http://www.forth.gr/forthcert/>
 - ISO 27001:2005 Certification: Participated in the design stages of an internal Information Security Management System based on the ISO 27001 standard, industry best practices and relevant guidelines
 - Security Policies Knowledgebase: Configured a tool offering SMEs a way to compose custom information security policies based on policy templates, security standards and best practice guidelines stored in a publicly available database (in co-operation with the European Network and Information Security Agency, ENISA)
http://www.enisa.europa.eu/doc/pdf/deliverables/knowledge_sec_policy_com_2008.pdf

- Dates (from – to) August 2005 – June 2007
- Name and address of employer Virtual-Trip Ltd
Science and Technology Park of Crete, Heraklion, Greece
<http://www.vtrip.net/default.htm>
- Type of business or sector SME, Internet Services, Research & Development
- Occupation or position held ICT Security Consultant
- Main activities and responsibilities
 - Managing the company's involvement in following research projects
 - MILTIADES (GSRT, Greece, 01/04/2006 – 31/03/2008), Multi-Layer Techniques for Attack DEtection Systems. The objective of this project was to contribute towards the development of a second-generation early warning system able to detect and fingerprint polymorphic and metamorphic worms using two novel techniques. The first technique contributes towards the containment of zero-day polymorphic worms by designing and developing appropriate mechanisms which impede the spreading rate of such worms by poisoning their intelligence gathering services with stale information. The second technique explores pioneering ways to detect polymorphic and metamorphic worms at the application level because these worms can not be otherwise identified at the network level.
 - ESTIA (GSRT, Greece, 01/01/2005 - 31/12/2006), A Vulnerability Assessment Tool, The objective of the project ESTIA was the development of an automated service for personal computer vulnerability scanning and security patching. ESTIA, a remote service offered over the internet, provides home users and SMEs with the opportunity to improve the security of their computing systems. As a result, those who benefit will gain the trust required to do business on-line. In more detail, ESTIA carries out a large number of penetration tests and, depending on the results, instructs users on how to fix security holes.
 - Provision of the following Services to public and private institutions

- Authentication Infrastructures
- Security Assessment

- Dates (from – to) May 2005 – June 2007
- Name and address of employer Technological Educational Institute of Crete, Heraklion, Greece
- Type of business or sector Research Center
- Occupation or position held Senior Researcher
- Main activities and responsibilities
 - KERVEROS (EPAEK II – Archimedes II, 01/08/2005 – 30/07/2007), Researched and implemented techniques for the secure provisioning of on-demand multimedia services over DVB-T (downlink) and wireless network (uplink) technologies (co-funded by the European Regional Development Fund and national resources)

- Dates (from – to) June 2000 to June 2003
- Name and address of employer Barclays Capital
Canary Wharf, London, United Kingdom
<http://www.barcap.com/>
- Type of business or sector Investment Banking
- Occupation or position held Security Engineer
- Main activities and responsibilities
 - Member of a team responsible for the design, development and productionisation of several security technologies like: Server Intrusion Detection, Identity Management, Secure Instant Messaging, Virus Management and Active Content Protection
 - Most heavily involved with the design and implementation of a Public Key Infrastructure (PKI) for the bank, used by all e-commerce (on-line trading) applications. The PKI featured:
 - Certificate lifecycle management: certificate authorization, creation, issuance, distribution, publication, use, notification of expiry, renewal, revocation
 - Hardware Security Modules: tamper resistant crypto accelerator for CA's private key storage and client certificate signing with split activation and administration responsibilities
 - Secure Printing: issuance of PIN numbers used for two factor authentication for clients requesting certificates
 - Internal Controls: secure operating procedures for all administrative users of the PKI system stating administrative roles, privileges and split responsibilities
 - Physical Controls: CA locked in cabinet in a locked cage alarmed to Security Control with front and rear video surveillance, cage/cabinet keys authorised for release, signed for and delivered as per policy, access to the data centres granted by Data Centre Group, access to the physical security safes only allowed by site Physical Security staff
 - Disaster Recovery: similar arrangements for secondary CA host and token reader device at remote data centre
 - Security Policies: Composition of a Certificate Policy and a Certificate Practice Statement
 - External audits ensured service security and availability

- Dates (from – to) June 1995 to December 1998
- Name and address of employer University of Cambridge, Computer Laboratory, Security Group
Cambridge, United Kingdom
<http://www.cl.cam.ac.uk/research/security/>
- Type of business or sector Education
- Occupation or position held Research Assistant
- Main activities and responsibilities
 - Researched, designed and implemented methods for electronic payments and in particular micropayment protocols (funded by the UK Department of Industry)
 - Developed techniques for digital copyright protection and in particular digital watermarking (funded by Intel Corporation)
 - Co-authored a book on digital certification infrastructures

PROFESSIONAL QUALIFICATIONS AND TRAINING

- Dates (from – to) May 11-15, 2009
- Name and address of educational body
ISOQAR Ltd
A UK accredited certification body
7, Avgis Str. - 145 69 Anixi , Athens, Greece
<http://www.isoqar.gr/>
- Course
IRCA certified ISMS auditor training
Provides information security professionals with the knowledge and skills required to assess the conformance of an organization's information security management system to ISO 27001

- Dates (from – to) July 5-6, 2007
- Name and address of educational body
Terena (Trans-European Research and Education Networking Association)
<http://www.terena.org/activities/csirt-training/>
- Course
CSIRT (Computer Security Incident Response Team) Training
Provides specialist training courses to train staff of (new) CSIRTs in the organisational, operational, technical, market and legal issues involved in providing CSIRT services

PERSONAL SKILLS AND COMPETENCES

*Acquired in the course of life and career
but not necessarily covered by formal
certificates and diplomas.*

MOTHER TONGUE

GREEK

OTHER LANGUAGES

ENGLISH

- Reading skills
- Writing skills
- Verbal skills

excellent
excellent
excellent

TECHNICAL SKILLS AND COMPETENCES

*With computers, specific kinds of
equipment, machinery, etc.*

PKI
Security Assessment, Security Tools
Incident Response
Secure Content
Secure Servers
Secure Applications
Computer Programming, Crypto Libraries
Identity Management:
Web Development, e-shops
Network Tools

ADDITIONAL INFORMATION

Military Service

Dates (from – to): August 2003 to August 2004
Served the army as Armoured Corps sergeant.

References

Supplied on request.

DRIVING LICENCE(S)

Full clean UK driving licence (Category B)

ADDITIONAL INFORMATION

PUBLICATIONS

(>360 citations,

<http://scholar.google.gr/>)

Military Service

- "NetCard - A Practical Electronic Cash Scheme", R. Anderson, C. Manifavas, and C. Sutherland, 1996 (4th) Cambridge Workshop on Security Protocols, Lecture Notes in Computer Science 1189, pp. 49-57, Springer 1997
<http://www.springerlink.com/content/105633/?k=manifavas>
- "Chameleon - A New Kind of Stream Cipher", R. Anderson and C. Manifavas, 1997 (4th) Fast Software Encryption Workshop, Lecture Notes in Computer Science 1267, pp. 107-113, Springer 1997
<http://www.springerlink.com/content/105633/?k=manifavas>
- "A New Family of Authentication Protocols", R. Anderson, F. Bergadano, B. Crispo, J-H Lee, C. Manifavas, and R. Needham, Operating Systems Review, 32(4), pp. 9-20, Oct. 1998
<http://portal.acm.org/citation.cfm?id=302353>
- "The Global Internet Trust Register", R. Anderson, B. Crispo, JH Lee, C. Manifavas, V. Matyas and FAP Petitcolas, MIT Press, Cambridge, MA, Apr. 1999, ISBN 0-262-51105-3
<http://mitpress.mit.edu/catalog/item/default.asp?tid=6214&ttype=2>
- "Evaluation of Micropayment Transaction Costs", I. Papaefstathiou and C. Manifavas, Journal of Electronic Commerce Research, Vol. 5, No. 2, pp. 99-113 2004
<http://www.csulb.edu/web/journals/jecr/issues/20042/index.htm>
- "Securing Interactive Services Provided Over DVB-T", C. Manifavas, P. Fragopoulou, V. Zacharopoulos, G. Mastorakis, 2nd International Conference on Telecommunications & Multimedia (TEMU 2006), 5-7 July, Heraklion, Crete, Greece
<http://www.temu.gr/2006/program.asp>
- "KNOWLEDGEBASE: Tool-based Security Policy Composition", ENISA, Jan. 2008,
http://www.enisa.europa.eu/media/faq-on-enisa/faq_knowledgebase_tool_20080327-1.pdf/at_download/file
http://www.enisa.europa.eu/doc/pdf/deliverables/knowledge_sec_policy_com_2008.pdf
- "High-End Reconfigurable Systems for Fast Password Cracking", K. Theoharoulis, C. Manifavas and I. Papaefstathiou, 2009 17th IEEE Symposium on Field Programmable Custom Computing Machines, Apr. 2009
<http://www.computer.org/portal/web/csdl/doi/10.1109/FCCM.2009.48>
- "Mobile Identity Management", ENISA Position Paper, Andre Arnes, Jorge Aguado Bombin, Elisa Boschi, Raul Benito Cortinas, Francesca Gaudino, Giles Hobgen, Thomas Karagiannis, Harry Manifavas, Katerina Mitrokotsa, Ingo Naumann, Panos Papadimitratos, Maria Papadopouli, George Roussos, Katerina Tsakona, April 2010,
<http://www.enisa.europa.eu/act/it/eid/Mobile%20IDM>
- "Development and Implementation of a Network Processor Architecture in Reconfigurable Logic (FPGA)", C. Stefanatos, I. Papaefstathiou and C. Manifavas, 8th IEEE Workshop on Intelligent Solutions in Embedded Systems, Heraklion, Crete, Greece, 8-9 July 2010
https://wises2010.cs.teicrete.gr/index.php?option=com_content&view=article&id=68&Itemid=107
- "Explorent: A malicious application targeting the Windows XP platform", George Philippakis and Charalampos Manifavas, 4th International Conference on Telecommunications & Multimedia (TEMU 2010), 14-16 July, Chania, Crete, Greece,
<http://www.temu.gr/2010/program.html>
- "Implementing Rainbow Tables in High-end FPGAs for Super-fast Password Cracking", K. Theoharoulis, C. Manifavas and I. Papaefstathiou, 20th International Conference on Field Programmable Logic and Applications, Milano, Italy, Aug. 31st - Sep. 2nd, 2010
<http://conferenze.dei.polimi.it/FPL2010/program.htm>
- "Security in Ad Hoc Wireless Sensor Networks", I. Papaefstathiou and C. Manifavas, Book chapter in "Security in Computing and Networking: The State-of-the-Art", 2011 (in Print)
- "Network Security: Private Communication in a Public World", Charlie Kaufman, Radia Perlman, Mike Speciner, Prentice Hall, C. Manifavas, editor of the Greek edition, 2011 (to be published)