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# Resume

(updated on 2017.04.02)

## **PERSONAL DETAILS**

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**Nationality:** Portuguesa

**Birth date:** 6 de Janeiro de 1973



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## PROFESSIONAL EXPERIENCE

### ISCTE-IUL ASSISTANT PROFESSOR (SINCE 2008)

ISCTE-IUL – Lisbon University Institute, ISTA/DCTI – ISCTE-IUL School of Technology and Architecture/Information Science and Technology Department, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal

#### PROFESSOR

Responsible for the preparation, coordination and lecturing of the following Curricular Units.

Curricular Year	Curricular Unit	Degree	Type
2008 -	Segurança em Redes e Sistemas de Informação	MEI, METI, MIG	D, C
2008 -	Projeto de Empresa Digital	LIGE(PL), MIG	D, C
2008 -	Desenvolvimento de Aplicações para Ambientes Móveis	MEI, METI, MIG	D, C
2008 - 2016	Gestão de Sistemas de Informação	LIGE(PL), MIG	D, C
2008 - 2014	Gestão de Projetos em Tecnologias e Sistemas de Informação	MEI, METI	D, C
2008 -	Segurança em Redes de Computadores	MOSS	D, C

(MEI - Master in Computer Engineering, METI - Master in Telecommunications and Computer Engineering, MIG - Master in Computer Science and Business Management, MOSS - Master on Open Source Software, LIGE(PL) - Degree in Computer Science and Business Management; D - Teaching, C - Coordination)

#### COMPUTER SCIENCE AND MANAGEMENT DEGREE DIRECTOR (SINCE 2011)

Since 2011, responsible for the coordination and management of the Computer Science and Management Degree.

#### COMPUTER SCIENCE AND MANAGEMENT DEGREE YEAR COORDINATOR (2008-2014)

From 2008 until 2014, responsible for the coordination of the Computer Science and Management degree 4th. year coordination.

#### ISCTE-IUL SCIENTIFIC COMMITTEE PLENARY MEMBER (2011-2014)

From 2011 until 2014, member of the ISCTE-IUL scientific committee plenary.

### BOOK AUTHOR (SINCE 2001)

FCA – Editora de Informática, Portugal

Co-authorship of the following technical/programming books (all in portuguese):

- “Programação com PHP”/PHP Programming
- “Programação com PHP 4”/PHP4 Programming
- “Programação com PHP 4.3”/PHP 4.3 Programming
- “Programação com PHP 5”/PHP5 Programming
- “Programação com PHP 5.2”/PHP 5.2 Programming
- “Programação com PHP 5.3”/PHP 5.3 Programming

### **ISTAR-IUL RESEARCH AND DEVELOPMENT (SINCE 2014)**

ISTAR-Information Sciences and Technologies and Architecture Research Center (ISTAR-IUL), Ed. ISCTE, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal.

Member of the Software System Engineering research group.

#### **PARTICIPATION ON MANAGEMENT ACTIVITIES**

- Since 2014, Member of the ISTAR-IUL Scientific Committee
- Since 2014, Member of the ISTAR-IUL Executive Committee

#### **R&D PROJECTS**

Participation on the following national and international R&D projects.

#### **DATA SCIENCE FOR NON-PROGRAMMERS**

Researcher in the “DataScience4NP - MData Science for Non-Programmers” project, financed by FCT, PTDC/EEI-ESS/1189/2014, 2016 – 2019

### **ADETTI-IUL PROJECT AND TEAM MANAGER (1998-2014)**

ADETTI-IUL - Advanced Information Systems/Information Technologies Research Centre, Ed. ISCTE, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal

#### **PARTICIPATION ON MANAGEMENT ACTIVITIES**

While in ADETTI-IUL, I was involved in the following management activities:

- Since 2011, Member of the ADETTI-IUL Scientific Committee
- 2005-2007, ADETTI-IUL Vice-President

#### **PARTICIPATION IN INTERNATIONAL STANDARDISATION ACTIVITIES**

Participation on several international standardisation initiatives or some other related standard efforts:

- DMP - Digital Media Project (<http://www.dmpf.org>), a forum that debates the creation, usage and implementation of a secure and interoperable rights management solution
- Since April 2002, member of the ISO/IEC JTC 1/SC 29/WG 1 JPEG2000 National Delegation for Part 8 - JPSEC, Security



- 1998-2000, OPIMA – Open Platform for Interoperable Multimedia Access (<http://leonardo.chiariglione.org/standards/opima/index.htm>)  
*“The Open Platform Initiative for Multimedia Access (OPIMA) has been set up to develop specifications enabling a consumer to obtain a receiver and begin to consume and pay for services, without having prior knowledge of which services would be consumed, in a simple way such as by operating a remote control device. Click here for an explanatory drawing. The OPIMA platform is targeted at providing value-chain participants the ability to acquire, supply, process and consume multimedia services on a worldwide basis in accordance with the rights associated with these services. OPIMA specifically addresses intellectual property management and protection. OPIMA operates in the Industry Technical Agreement (ITA) program of the International Electrotechnical Commission (IEC).”*

## R&D PROJECTS

Participation on the following national and international R&D projects (in these projects I have collaborated on the elaboration of dozens of deliverables that are not listed here).

### LIGHTHOUSE – MONITORING THE AVAILABILITY AND PERFORMANCE OF HETEROGENEOUS SYSTEMS AND SERVICES THROUGH A MODULAR AND HIGHLY DISTRIBUTED ARCHITECTURE OVER THE INTERNET

Coordinator and researcher at the “LIGHTHOUSE - Monitoring the availability and performance of heterogeneous systems and services through a modular and highly distributed architecture over the Internet” project, financed by FEDER through the PME RD&T Incentive System, under the Lisbon Regional Operational Program – LISBOA-01-0202-FEDER-024890, 2012 – 2015

### AAL4ALL – AMBIENT ASSISTED LIVING FOR ALL

Participation in the “AAL4ALL – Ambient Assisted Living for All” project as researcher responsible for the leadership of the security architecture related tasks. Project financed by FEDER through the PME R&D Incentive System, under the Reference National Strategic Framework 2007-2013 (QREN), 2011 – 2014

### VISNET-II - NETWORKED AUDIOVISUAL MEDIA TECHNOLOGIES

Participation in the “VISNET-II - Networked Audiovisual Media Technologies” project (European Commission FP6 NoE IST-1-038398), 2007-2009. In this project I have participated in the planning and development of an interoperable platform based on service-oriented architectures capable of supporting multiple rights management systems.

*Abstract: “VISNET II builds on the success and achievements of the VISNET NoE to continue the progress towards achieving the NoE mission of creating a sustainable world force in Networked Audiovisual (AV) Media Technologies. VISNET II is a network of excellence with a clear vision for integration, research and dissemination plans. The research activities within VISNET II will cover 3 major thematic areas related to networked 2D/3D AV systems and home platforms. These are: Video Coding, Audiovisual Media Processing and Security”*

### INOCOP – PERFORMANCE INNOVATION AND IMPROVEMENT OF THE AUTOMOBILE CLUSTER

Participation as a researcher and task coordination in the “INOCOP - Performance Innovation and Improvement of the Automobile Cluster” project (Contract Ref.: 2004/EQUAL/A2/AD/235), 2005-2006. I have participated in the planning and development of an open-source cooperative work platform (based on the web and on the open-source Joomla system) to support different automobile communities of practice.

*Abstract: “The project intends to reinforce the cooperation between enterprises of different cluster sectors, promoting the creation of communities that include companies of different sectors, a common compilation of non-competitive knowledge and the development of common R&D projects. Through the functioning comprehension and the role of the communities of practice in the cluster companies, it will be possible to develop a model of the performance improvement based on the incorporation of knowledge in the products and business processes.”*

### HICOD2000 – HIGH-PERFORMANCE CODING, PROTECTION AND TRADING OF SATELLITE IMAGES, USING JPEG2000

Participation in the “HICOD2000 – High-Performance Coding, Protection and Trading Of Satellite Images, Using JPEG2000” (European Space Agency) project, 2005-2009. In the project I acted as technical coordinator and managed a project team. I’ve coordinated the development of a digital platform to improve the ESA earth observation products through the usage of the JPEG200 image standard and rights management technologies.

Abstract: "HICOD2000 is project that aims to: (a) Define and develop an inexpensive, open architecture and high-performance Grid-based computing environment to produce JPEG2000 coded digital images obtained from Earth Observation (EO) digital products, of small to very large sizes, requiring the trans-coding of such products into the JPEG2000 format; (b) Access JPEG2000 EO images in an interactive and flexible way; and (c) Define and develop a software architecture and introduce new concepts of electronic trading of EO digital products and/or related JPEG2000 images with end-users, able to provide secure access to such EO products in a flexible and scalable way (within the framework of a Digital Rights Management Architecture), enforcing contractual agreements between the content provider (ESA) and the end-user, as well as ensuring copyright protection of such digital items."

#### E-VOTING - A NEW ARCHITECTURAL FRAMEWORK FOR HANDLING RISK IN E-VOTING SYSTEMS

Participated as researcher in the "E-Voting - A new Architectural Framework for Handling Risk in E-Voting Systems (FCT/POSI/EIA/57038/2004)" project, 2005-2007.

Abstract: "The introduction of electronic voting (e-voting) in National Election Systems has recently received a significant interest in several countries (e.g. USA, Canada, UK, Portugal). The studies conducted until today clearly demonstrate that this type of system is perceived as having a high level of risk. As researchers in the complex systems, organisation and software engineering fields, we are trying to analyse the problems associated to general e-voting systems, relating them with the system architecture and components, and finding new ways to deploy systems with reduced risk levels. This problem is a challenging one, since it will be necessary to identify the multiple dimensions that characterise e-voting systems and associated risks. These risks do not roll up from one specific research topic, but rather have a strong multidisciplinary nature. This project does not aim at tackling one or two well-known issues, e.g. security, but leaving the whole problem unsolved. On the contrary, our perspective is that a whole new integrated architecture must be developed, one that is capable to tackle the intrinsic complex nature of e-voting systems. This new approach must be multidisciplinary, since problems with e-voting lay in different research areas, such as distributed systems, information security, HCI, software design or organisation. This new approach must also be visionary, since most of the problems with e-voting are large-scale in several dimensions (users, components, requirements, risks). Our proposed solution will consist of an architectural framework with high-level components conceived for handling risk in e-voting systems."

#### WCAM - WIRELESS CAMERAS AND AUDIO-VISUAL SEAMLESS NETWORKING

WCAM - Wireless Cameras and audio-visual seamless networking (European Commission FP6 STREP IST-2003-507204), 2004-2006. Technical coordination and management of the Portuguese team in some of the work packages.

Abstract: "The WCAM project will study, develop and validate a wireless (WLAN) seamless and secured end-to-end networked audio-visual system focused on the technology convergence between video surveillance and multimedia distribution over the Internet. It will take into account real time aspects as well as security and scalability. The project will improve state of the art technologies in each of the technological components involved in the system and combine them. The WCAM system will be installed and tested with users of both multimedia distribution and video surveillance communities. Recent progresses in flexible bit streams representation of video including Region-of-Interest (ROI) have led to new standardisation efforts in the frame of JPEG-2000."

#### MEDIANET - MULTIMEDIA NETWORKING

MEDIANET - Multimedia Networking (European Commission FP6 IP FP6-507452), 2004-2006. Technical coordination and management of the Portuguese team in some of the work packages.

Abstract: "MEDIANET is about media content exchanges in digital networks. Targeting multimedia communications and A/V content distribution services for residential markets, it addresses new possible supply chain architectures and cooperation schemes between content owners, service providers, network service providers, and personal computer and consumer electronics industries. The MEDIANET Consortium gathers major European players: Consumer Electronics, Telecommunication equipment and services, Components, Value-added Integrators, Software Developers, Content Aggregators, as well as a number of Universities and Research Institutes in the vanguard of digital technologies, telecommunication and multimedia sciences. Research experts on industrial economics of content and networks stimulate the Consortium activities towards more economical relevance. The MEDIANET initiative aims at the abolition of obstacles in Europe to the exchange of digital media and audio-visual goods from creators and providers to customers and between citizens, while protecting at the same time suppliers' and customers' investments, content owners' rights, assuring a fair revenues sharing to the stakeholders of the value chain and permitting the necessary regulation actions. The MEDIANET open architecture model will enable the deployment of a plethora of different multimedia services from different suppliers over common access and home networks. It will develop enabling technologies, equipment, architectures, services as well as related standards, business models and good practices, addressing content distribution and access services, access/home interworking at the gateway, common home networking, distributed media

storage systems, multimedia terminal platforms, common content protection approaches with different digital rights management systems. Advanced coding/decoding circuits based on the latest standards will enable HQ audio-video distribution over wireless connections.”

#### MOSES – MPEG OPEN SECURITY FOR EMBEDDED SYSTEMS

MOSES – MPEG Open Security for Embedded Systems (European Commission FP5 STREP IST-2001-34144), 2001-2003. Technical coordination and management of the Portuguese team in some of the work packages.

Abstract: “The main objectives of the MOSES project are: (1) extending the OPIMA interfaces and architecture to achieve compliance with the most recent security standards, some of which are still in the making like MPEG IPMP Extensions and DVB-CPCM; (2) extending current business models to encompass operational scenarios where the full set of functionalities pertaining to IPMP systems is implemented and tested, including means for controlling copying, moving, exporting and importing protected content as well as the relevant business and service data; (3) porting this end-to-end MPEG-4 compliant secure infrastructure to devices other than the PC, addressing typical CE platforms based on open development suites, like WinCE and DVB-MHP and point out additional actions needed for subsequent full and successful commercial exploitation. The developed software/hardware aims also at representing a European test-bed where new pieces of technology specified by the main standardisation fora in the field of content protection can be assessed and a coordinated European input to standard bodies can be provided.”

#### 2KAN - JPEG 2000 ADVANCED NETWORKING

2KAN - JPEG 2000 Advanced Networking (European Commission STREP IST-2001-34096), 2001-2003. Co-ordination of some more technical work packages.

Abstract: “The main emphasis of the 2KAN project is to address the four new JPEG 2000 work items, namely JPSEC (security), JPIP (interactivity), JP3D (volumetric) and JPWL (wireless) which correspond to the parts 8, 9, 10 and 11 of the standard respectively. 2KAN is also adding major enhancements to the public JPEG website, allowing it to become self-financed through sponsorship and specific commercial services. Finally, the last goal of this project is to disseminate the main research results and to promote JPEG 2000 and the new parts.”

#### PRIAM – PLATFORM FOR REAL TIME INTERACTIVE ACCESS TO MEGA IMAGES

PRIAM – Platform for Real Time Interactive Access to Mega Images (European Commission FP5 STREP IST-2000-28646), 2000-2002. Technical coordination and management of the Portuguese team in some of the work packages.

Abstract: “The project will validate the advantages of the new JPEG-2000 standard in critical and real time applications such as medical and remote sensing applications. These applications require efficient implementation of the (de-) compression algorithms for very large images, interactive tools for data selection and personalisation of the content, as well as cooperative discussions and decisions (including diagnostics for the medical applications).”

#### MIGRATOR 2000 - MIGRATION OF IMAGE GENERATION AND REGISTRATION AUTHORING TOOLS TO THE OPEN RESOURCES OF JPEG2000

MIGRATOR 2000 - Migration of Image Generation and Registration Authoring Tools to the Open Resources of JPEG2000 (European Commission FP5 STREP IST-1999-11422), 1999-2001. Coordination of some more technical work packages.

Abstract: “Interoperability and the goals defined by the European Commission make it essential that content creation Authoring Tools comply with the new standards. For still pictures, JPEG 2000 will be soon adopted to replace the popular current JPEG. Its new features reflect the most recent user's requirements. MIGRATOR 2000 addresses image bank content creation, in terms of management and personalisation, taking advantage of JPEG 2000 functionalities, with a new line of Authoring Tools - new compression algorithm based on wavelets - image resolution and/or quality scalability - static and dynamic region of interest coding and decoding - error resilience method for wireless transmission - content protection through registration and watermarking.”

#### APPLIED RESEARCH AND DEVELOPMENT PROJECTS AND KNOWLEDGE TRANSFER

Participation as project manager in the following applied research and development projects and knowledge transfer:

- 2010, Interactive Manual Development, Laboratório Nacional de Engenharia Civil (LNEC). Development of an infra-structure for the creation of a manual (based on web technologies) for interactive training.

- 2010, Training in Project Management with Microsoft Project, Laboratório Nacional de Engenharia Civil (LNEC). Training sessions targeted to the Civil Engineering area about Project Management, according to the good practices of the Project Management Institute (PMI) and Project Management Body of Knowledge (PMBok) using Microsoft Project.
- 2009 - 2012, Web-enablement and Business Process Automation, Audiogest/Passmusica. Study and development of the internal organisational processes, redesign and implementation of web-based information systems that improve the different business processes and increase the organisation efficiency.
- 2008 - 2009, Music Active Control, Audiogest. Study and development of a project capable of automatically identifying music audio tracks. The system uses audio-fingerprinting technology to identify music from small music samples.
- 2007, Dynamic Shelve Configurator, Coolblok. Study and development of a software capable of optimising and propose shelve configuration solutions for large refrigeration containers.
- 2007, 2009, Linux, Apache, MySQL and PHP (LAMP) training, Caixa Mágica Software. Development of a training action about LAMP.
- 2003 - 2005, Training in Information Systems and Technology Management, Ordem dos Revisores Oficiais de Contas (OROC). Development of an annual training action that integrates the “Curso de Preparação para ROC” course.
- 1998 - 2002, Portal of Electoral Results, Instituto das Tecnologias de Informação na Justiça (ITIJ)/Direção Geral dos Serviços de Informática do Ministério da Justiça (DGSI). Study and development of a Web portal to disseminate in (almost) real time the results of electoral exercises:
  - National Referendum about the Abortion, 1998
  - National Referendum about the Region Creation in Portugal, 1998
  - European Elections 1999
  - Legislative Elections 1999
  - Presidential Elections 2001
  - Regional Elections 2001
  - Legislative Elections 2002.

### **ISCTE-IUL ASSISTANT (2003-2008)**

ISCTE-IUL – Instituto Universitário de Lisboa, ISTA/DCTI – ISCTE-IUL Escola de Tecnologias e de Arquitetura/ Departamento de Ciências e Tecnologias de Informação, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal

#### **PROFESSOR**

Responsible for preparing and lecturing the following curricular units:

- Information Systems Management (4th. year, Business and Computer Science degree)
- Electronic Commerce (4th. year, Business and Computer Science degree)
- Security Interfaces (1st. year, Master in Computer Science and Telecommunications)
- Information Technology Management (5th. year, Business and Computer Science degree)
- Web Programming Languages (1st. year, Information Systems Development Post-Graduation)

### **ISCTE-IUL TRAINEE ASSISTANT (1998-2003)**

ISCTE-IUL – Instituto Universitário de Lisboa, ISTA/DCTI – ISCTE-IUL Escola de Tecnologias e de Arquitetura/ Departamento de Ciências e Tecnologias de Informação, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal

## PROFESSOR

Trainee assistant and professor in the following curricular units:

- Information Technology Management (5th. year, Business and Computer Science degree)
- Information Systems Management (5th. year, Business and Computer Science degree)
- Programming I (1st. year, Business and Computer Science degree, Computer Science and Telecommunications degree)
- Business Informatics and Information Resources Management (1st. year, Business and Computer Science degree, and Business Management)

## ENTREPRENEUR (1990, 2012)

While ADETTI researcher, I've promoted the creation of several technology-based startups that seek to explore in the market some of the technologies developed by the research group.

## NETMUST (SINCE 2012)

Netmust is a small company that was born from our participation in the ISCTE-IUL/MIT Portugal Innovation and Entrepreneurship Initiative contest, winning an Honourable Mention in the IT and Web field. The company offers a set of Web and digital content related services.

## PORTIMAX (1999-2001)

Portimax was a small company that offered a digital image broker over the Internet. The company offered several digitalisation of the photographer's portfolio and its online availability and commercialisation.

## ADETTI RESEARCH AND DEVELOPMENT (1995-1998)

ADETTI – Associação para o Desenvolvimento das Telecomunicações e Técnicas de Informática, Ed. ISCTE, Av. Das Forças Armadas, 1600-082 Lisboa, Portugal

## R&D PROJECTS

Participation in the following international R&D projects:

- OKAPI – Open Kernel for Access to Protected Interoperable Interactive Services (ACTS – AC051), 2001-2003. Technical coordination and team management in some project work packages.  
**Abstract:** "OKAPI aims to develop a trusted kernel, which appears like a distributed Operating System. This OKAPI Kernel will ensure interoperability, openness, equity, user privacy and evolutivity for opening the European multi-media market to every potential service provider and user. A major target is to achieve through the kernel a maximum degree of commonality for the future European Multimedia Services Distribution System."

## APPLIED RESEARCH AND DEVELOPMENT PROJECTS AND KNOWLEDGE TRANSFER

- 1997, Application for the Introduction and Data Processing of Study Results, OBSERVA/CET – Centro de Estudos Territoriais. Design and implementation of an information systems that allow the storage and processing of statistical data about a Lisbon Urban Environment study.

## CIISCTE IS/IT SUPPORT AND WEB-DESIGN (1994-1995)

ISCTE - Instituto Superior de Ciências do Trabalho e da Empresas, CIISCTE – Centro de Informática do ISCTE, Ed. ISCTE, Av. Das Forças Armadas, 1649-026 Lisboa, Portugal

During the reported period I have performed the following tasks:

- Helpdesk and Technical Support: ISCTE end-users and IT 1st. line support
- Development of ISCTE web-site: support for the development, management and maintenance of the 1st. version of the ISCTE website

## ACADEMIC AND PROFESSIONAL TRAINING

### ACADEMIC

#### PHD. IN COMPUTER ARCHITECTURE AND DISTRIBUTED SYSTEMS (2008)

2008, UPC – Universitat Polytecnic de Catalunya, PhD in Computer Architecture and Distributed Systems, thesis entitle “iDRM - Interoperability Mechanisms for Open Rights Management Platforms”. Final grade “Excellent Cum Laude” (the highest possible mark).

The work was supervised by Prof. Jaime Delgado, from the Computer Architecture Department (UPC, Barcelona).

The final thesis presentation and discussion jury was composed by Prof. Manel Medina (president) from the Computer Architecture Department (UPC, Barcelona), Prof. Silvia Llorente (secretary) from the Computer Architecture Department (UPC, Barcelona), Prof. Panos Kudumakis (vocal and main jury element) from the Department of Electronic Engineering (Queen Mary University of London, London), Prof. Ramon Martí (vocal), from the Departament d'Enginyeria de la Informació i de les Comunicacions (Universitat Autònoma de Barcelona, Barcelona) and the Prof. Enric Peig (vocal), from the Departament de Tecnologies de la Informació i les Comunicacions (Universitat Pompeu Fabra, Barcelona).

**Abstract:** “Today’s technology is raising important challenges in the Intellectual Property (IP) field in general and to Copyright in particular [Arkenbout et al., 2004]. The same technology that has made possible the access to content in a ubiquitous manner, available to everyone in a simple and fast way, is also the main responsible for the challenges affecting the digital content IP of our days.

*Technological solutions and legal frameworks were created to meet these new challenges. From the technological point of view, Rights Management Systems (RMS) and Copy Protection Systems (CPS) have been developed and deployed to try to cope with them. At first, they seemed to work however, their closed and non-interoperable nature and a growing number of wrong strategic business decisions, soon lead to a strong opposition. One of the strongest negative points is the lack of rights management interoperability.*

*The work presented on this thesis primarily addresses the RMS interoperability problems. The objective of the thesis is to present some possible mechanisms to improve the interoperability between the different existing and emerging rights management platforms.*

*Several different possible directions to rights management interoperability are pointed in this thesis. One of the most important is openness. Interoperability between different rights management mechanisms can only be achieved if they are open up to a certain level.*

*Based on this concept, an open rights management platform is designed and presented in this thesis. Also, some of the interoperability mechanisms are presented and explained. This platform makes usage of the emerging service-oriented architectures to provide a set of distributed rights management services.*

*Rights management solutions rely heavily on the establishment of authenticated and trust environments between its different elements. While considering different RMS, the establishment of such trust environments can be somehow complex. This thesis provides a contribution to the establishment of interoperable RMS trust environments through the usage of Public-Key Infrastructure (PKI) mechanisms.*

*Modern rights management systems have to handle with both keying material and licenses which are used mostly to define how content is governed by the system. Managing this is a complex and hard task when different rights management solutions are considered. This thesis presents and describes a generic model to handle the key and license management life cycle, that can be used to establish a global interoperable management solution between different RMS.”*

#### MSC. IN INFORMATION SYSTEMS MANAGEMENT (2003)

2003, ISCTE - Instituto Superior de Ciências do Trabalho e da Empresa, MSc. in Information Systems Management (MGS). Final grade obtained: 17 (on a 0-20 scale). The thesis theme was “The importance of PKI in the digital content e-Commerce”, having received a grade “Very Good, with distinction” (the highest possible grade).

The work was supervised by Prof. José Cordeiro Gomes, from the Information Sciences and Technologies Department from ISCTE-IUL.

The jury was composed by Prof. Pedro Veiga (vogal and main element of the jury) from the Computer Science Department (Faculdade de Ciências da Universidade de Lisboa), Prof. Miguel Dias (vogal) from the Information Sciences and Technologies Department (ISCTE) and Prof. José Cordeiro Gomes (vogal) from the Information Sciences and Technologies Department (ISCTE).

**Resumo:** *“The new economy, essentially based on the Internet, depends from the information validity and security. Traditional commerce would not exist without the trust bounds between the seller and buyer would not been established. In the e-Commerce this aspect is important due to the in-existence of physical contact between both participants.*

*The new digital content commercialisation models through electronic means raise important intellectual property security and management challenges that need to be faced in a serious manner using a set of efficient security measures.*

*Trust is equally important in this type of e-Commerce. Although the trust problem does not depend uniquely on the technological component, it is a crucial factor that bases itself on cryptography to ensure some basic principles: privacy, authentication and non-repudiation. The ubiquitous trust model that is used in based in PKI and is used to ensure the intellectual property protection and management in the digital content e-Commerce.”*

#### BUSINESS AND COMPUTER SCIENCE DEGREE (1997)

1997, ISCTE - Instituto Superior de Ciências do Trabalho e da Empresa, Licenciatura em Informática e Gestão de Empresas (5 year degree). Final grade: 14 (on a 0-20 scale).

In the final degree project was named “TelemedNet - Telemedicine system”, with a final grade of 17 (on a 0-20 scale).

#### HIGH SCHOOL (1998 - 1991)

High School progress:

- 1990 – 1991: Escola Secundária de Rio de Mouro, 12º Year. Final grade: 18 (on a 0-20 scale)
- 1988 – 1990: Escola Secundária de Rio de Mouro, 10º and 11º year, C area, Computer science option. Final grade: 16 (on a 0-20 scale)

### PROFESSIONAL

#### MICRO-CERTIFICATIONS

Micro-Certification on “Cryptography”, CYBRARY, 03.03.2017

Micro-Certification on “Fundamental Cryptography”, CYBRARY, 03.03.2017

#### TRAINING COURSE “II EDITION OF THE CYBERSECURITY AND CYBERSPACE CRISIS MANAGEMENT COURSE” (2015)

Training course on “Cybersecurity and Cyberspace Crisis Management”, held at the Instituto da Defesa Nacional, organised together by the Instituto de Defesa Nacional and Academia Militar, 16 - 27 March, 2015

#### TRAINING COURSE “TEACHER-TO-TEACHER: IOS APPLICATION DEVELOPMENT (IPAD/IPHONE/IPOD TOUCH)” (2011)

Training course “Teacher-to-Teacher: iOS Application Development (iPad/iPhone/iPod Touch)”, Prof. Nicholas Outram (Plymouth University, UK), held at the Instituto Politécnico de Leiria, 18 - 21 October, 2011

#### TRAINING COURSE “HOW TO PREPARE COMPETITIVE PROPOSALS”



Training course “How to prepare competitive proposals”, promoted by GPPQ - Gabinete de Promoção do 7º Programa-Quadro de I&DT, held at Universidade de Évora, 18 March 2009

#### TRAINING COURSE “.NET 2.0” (2007)

Participation in the training course promoted by the ISEL Centro de Cálculo and Microsoft “.NET 2.0”, held at ISCTE-IUL, 18-22 October 2007.

Training as covered the following topics:

- Common Language Infrastructure and C# 2.0
- ADO.NET
- ASP.NET 2.0
- Windows Communication Foundation - WCF
- Windows Presentation Foundation - WPF

#### TRAINING COURSE “SOFTWARE QUALITY ASSURANCE - PROCESS IMPLEMENTATION” (2005)

Participation in the training course promoted by Sinfic, e realizado pelo European Software Institute – “Software Quality Assurance - Process Implementation”, 26 - 27 de Outubro de 2005.

The course was given by ESI (European Software Institute). At the end of the of the training, trainees have received a certificate issued by ESI.

The training covered the following topics:

- The Quality Assurance (QA) process;
- Requirements from the QA process in its multiple models (ISO 9001, SW - CMM e CMMI);
- Infra-structure for the implementation of the QA process: process, resources and tools;
- Qualifying requirements for auditors/reviewers of the QA process;
- The QA process: planning the activities and the development of audits/reviews, follow non-conformities, and analyse results for continuous improvement.

#### C# COURSE (2004)

Participation in the course promoted by Microsoft Portugal, “C# Shot” about the C# programming language and the .NET platform, 9-13 February 2004.

## PERSONAL COMPETENCIES

### ASSOCIATIONS

Since 2012, ACM member (Association for Computer Machinery), nº 9585834 ([www.acm.org](http://www.acm.org))

Since 2012, AP2SI founder member (Associação Portuguesa para a Promoção da Segurança da Informação) ([www.ap2si.org](http://www.ap2si.org))

Since 2014, USENIX (The Advanced Computing Systems Association) campus representative at ISCTE-IUL ([www.usenix.org](http://www.usenix.org))

Since 2007, OWASP (Open Web Applications Security Project), [www.owasp.org](http://www.owasp.org)

### COORDINATION

Since 2007, member and leader of the national OWASP delegation - Open Web Application Security Project ([www.owasp.org](http://www.owasp.org))

### LANGUAGES

LANGUAGE	Read	Write	Speak
Portuguese	Native	Native	Native
English	Excellent	Good	Good
French	Good	Average	Average
Spanish	Good	Average	Average

### PRIZES AND GRANTS

ISCTE-IUL Pedagogical Prize, in the Digital Enterprise Project (PED) Curricular Unit, 2016

ISCTE-IUL Pedagogical Prize, in the Digital Enterprise Project (PED) Curricular Unit, 2014

ISCTE-IUL Scientific Prize, assigned to the paper "Serrão, C., Rodriguez, E. & Delgado, J. (2011) Approaching the rights management interoperability problem using intelligent brokerage mechanisms. Computer Communications, 34 (2), 129-139. Doi 10.1016/j.comcom.2010.04.001", 2012

Honourable Mention in the 2nd. edition of the "ISCTE-IUL MIT Portugal Innovation and Entrepreneurship Initiative" contest, in the IT & Web category, with the project "Netmust - Networked Music System", 2011

Awarded a Marie-Curie grant (Marie-Curie Intra-European Fellowships), under the program "Structuring the European Research Area" - Call identifier: FP6-2005-Mobility-5, Proposal N° 040164- iDRM "Interoperable Rights Management over DRM Platforms", 2006-2007 (12 months duration)

## FINAL DEGREE PROJECTS SUPERVISION

Final degree projects that were developed under my supervision. In each of the projects a description of the year, project title, the entities involved and a short description of the project.

- João Nobre, Music.Active.Control appliance, Computer Science and Telecommunications degree, ISCTE/Adetti e AudioGest, development of an hardware and software platform that allows the automatic monitoring of music through audio-fingerprinting, 2006-2007
- João Varela, Music.Active.Control Information System, Business and Computer Science degree, ISCTE/Adetti e AudioGest, development of an information system that will allow the creation of a music database and respective database, 2006-2007
- Pedro Fonseca, P2PDoRM - Peer to Peer Digital object Rights Management, Business and Computer Science degree, ISCTE/Adetti, development of a P2P application for the distribution of rights managed content, 2005-2006
- Bruno Redondo, Nuno Reis, Nuno Salgueiro, OMAPhone (server), Business and Computer Science degree, ISCTE/Adetti/Siemens, development of mobile digital content distribution platform using OMA 2.0, 2005-2006
- Francisco Pimenta, OMAPhone (client), Business and Computer Science degree, ISCTE/Adetti/Siemens, development of a multimedia client for Symbian based devices as a platform for distributing mobile digital content using the OMA 2.0 standard, 2005-2006
- Filipe Gomes, Paulo Santos, Ricardo Quaresma., INSide, Business and Computer Science degree, ISCTE/CASE, development of an Enterprise Project Management (EPM) solution, 2004-2005
- Projeto "ShE", Business and Computer Science degree, ISCTE/PT-Si, design and implementation of an on-line client support application for a Portugal Telecom's billing application, 2004-2005
- Projeto de Fatura Electrónica, Computer Science and Telecommunications degree, ISCTE/PT-Si, design and implementation of an Electronic Billing Presentation and Payment (EBPP) solution for Portugal Telecom, 2004-2005
- Auditoria de Segurança de Sistemas de Informação, Computer Science and Telecommunications degree, ISCTE/PT-Si, Portugal Telecom's information systems security audit based on the ISO 17799 standard, 2004-2005
- Feliciano Grosso, Sérgio Pardal, Sérgio Silva, Open-Source TeamWork platform (OSTW), Business and Computer Science degree, ISCTE/Adetti, design and implementation of an open-source solution to support collaborative/cooperative work, 2003-2004
- Projeto "GIF", Business and Computer Science degree, ISCTE/Prototipo, design and implementation of an application to control financial flows inside a company, 2003-2004
- Projeto de Manutenção On-Line, Business and Computer Science degree, ISCTE/Case, design and implementation of a SAP application to support machine maintenance business processes through mobile devices, 2002-2003
- Sandra Luz, Paula Santos, e-Learn-IT, Business and Computer Science degree, ISCTE/Sybase, design and implementation of a distance learning system, 2001-2002

## EVALUATION OF FINAL DEGREE PROJECTS

2004/2005, ETI, PT Casa Segura, (ISCTE/PT-Si), Information system development for remote control and visualisation of domestic video-surveillance data

2004/2005, ETI, WebToPrint, (ISCTE/Xerox) Information system development to allow personalised printing from web pages

## PHD PROJECTS SUPERVISION

PhD supervisor, Nuno Teodoro, thesis "Cyber Security Management System with a Progressive Maturity Model", on-going

PhD supervisor, Joaquim Marques, thesis "Scientific and Educational Knowledge Intellectual Property Rights Management", 2016

## MSC PROJECTS SUPERVISION

Student	Degree	Thesis	Year	Grade
Rui Manuel Policarpo	MEI	Melhoria de Contacto com a Natureza Através da Utilização de Tecnologias Móveis	2016	16
Tiago Vieira	MIG	Análise de Aplicações Web no Sector Financeiro - Vulnerabilidades e Mitigações	2016	17
Fábio Martins	MEI	Controlo e monitorização de informação clínica partilhada	2016	14
Pedro Cananão	MEI	Plataforma de Registo e Gestão de resultados de testes de intrusão e auditorias automáticas	2016	17
Vitor Sousa	MEI	World Wide Web big data analytics framework for data leakage and vulnerabilities exposure	2016	16
António Teixeira	METI	Identificação de vulnerabilidades em Aplicações Web open-source	2015	16
Diogo Rocha	MEI	Javascript source and execution trust	2015	16
Marco Carvalho	MEI	Startup-on - Ferramenta de apoio à ideação e criação de novos negócios	2015	17
Fábio Pais	MIG	Managing Trust and Privacy on Social Networks	2015	15
Tiago Santos	MEI	SecJSON - Secure Javascript Object Notation	2016	17
Nuno Gonçalo Rosa Nunes Pires	METI	Sistema móvel para promoções personalizadas e marketing 1:1	2014	16
Bruno Rodrigues	MEI	Centro multimédia inteligente open-source baseado em hardware de baixo custo	2013	17
Filipe Patrício	MIG	Remuneração e promoção de bandas e artistas independentes através de um portal de música online	2013	16
Bruno Dinis	MEI	Software mapping and good practices using the Penetration Testing Execution Standard (PTES)	2013	17
Ronivon Candido Costa	MGSI	USING KERBEROS FOR ENTERPRISE CLOUD AUTHENTICATION	2013	17
André Filipe Marques Francisco	MIG	Solução de gestão de direitos digitais em redes sociais web	2012	17
Sérgio Filipe Miranda Vicente Carvalho	MEI	Sistema integrado de divulgação de resultados desportivos através de dispositivos móveis	2012	16
Carmem Fernandes Tavares	MEI	Sistema Integrado de Gestão de Projectos (através da Web e em plataformas móveis)	2013	14
Miguel André Rodrigues Gamito	MOSS	Sistema Integrado para a Gestão de Eventos de Natureza Científica	2012	16
Vicente Nuno Sá Canhoto	MGSI	Recomendação de música gratuita baseada nos interesses e preferências do utilizador	2013	16
André Filipe Marques Coelho	METI	Sluinde - Desenvolvimento de aplicação móvel/web informação das condições do mar	2013	

Rui Pedro Silva Marques de Almeida	METI	Web-security educational portal and self e-learning site	2013	14
Carlos Rodrigues	MIG	Sistema Informático de Apoio à Tomada de Decisão dos Treinadores de Futebol	2011	17
Nuno Teodoro	MEI	Auditoria de Segurança a Aplicações Web na World Wide Web Portuguesa	2011	19
André Ricardo	MIG	Building a Scalable Index and a Web Search Engine for Music on the Internet using OSS	2010	17

## GRANT RESEARCH PROJECTS SUPERVISION

Co-supervisor of the following research grants:

- Cengiz Acarturk, project QREN 5329 - Global Speech, 2011 - 2014
- Hyong Sil Cho, project QREN 5329 - Global Speech, 2011 - 2014
- Filipe Alexandre Gonçalves Gaspar, project “Marie Curie Industry-Academia Partnerships and Pathways”, 2011 - 2014
- Lucas Verri Garcia, project QREN 5329 - Global Speech, 2011 - 2013
- Cristiano Chesi, project QREN 5329 - Global Speech, 2011 - 2013
- Francisco Madureira Brito, project QREN 13852 - AAL4ALL, 2011 - 2013
- David Walter Figueira Jardim, project QREN 7900 - LUL – Living Usability Lab, 2010 - 2012
- José Carlos Almeida Santos, project QREN 5329 - WS – World Search, 2011 - 2012
- Sílvia Yonah Chung Rodrigues, project QREN 13852 - AAL4ALL, 2011 - 2012

## INTERNSHIP SUPERVISION

- Internship supervision, Technological Specialisation Course (CET) in Information Systems Technologies and Programming, Daniel Graça, “MusicBeetle - intelligent music centre based on open-source technology”, ADETTI-IUL, 2011
- Internship supervision, Technological Specialisation Course (CET) in Information Systems Technologies and Programming, Joary Neves, “Evaluating the QoS of IT outsourcing systems”, ADETTI-IUL, 2011
- Internship supervision, Technological Specialisation Course (CET) in Information Systems Technologies and Programming, Olga Vieira, “Rapid prototyping of Drupal websites”, ADETTI-IUL, 2011
- Scientific supervision of IAESTE internship, Boris Durdevic, “Automatic Control of Music Property Rights based on sound recognition through Audio Fingerprinting”, ADETTI-IUL, 2010

## PARTICIPATION IN PHD JURIES

- PhD jury member, Luísa Domingues, “Modelo de Análise de Performance para o Centro de Serviços Partilhados da Administração Pública Portuguesa - Caso de Estudo: GeRAP, E.P.E.”, PhD in Sciences and Information Technologies, May 2013

## PARTICIPATION IN MASTER JURIES

Student	Degree	Thesis	Year	Role	Place
Fábio Paulino	MEI	Design and development of a hybrid-based mobile app for ISCTE-IUL	Dec 2015	Juri	ISCTE-IUL, Lisboa
Mário Batista	MOSS	Methodology Approach to support a Open-Source ERP internationalization	Nov 2014	Juri	ISCTE-IUL, Lisboa
Luís Miguel Pires Teixeira da Silva	MIG	Model-Driven Generative Programming for BIS Mobile Applications	Jul 2014	Juri	ISCTE-IUL, Lisboa
Sérgio Samora Cerqueira	MEI	Context-aware personal agents for mobile environments	Nov 2013	Juri	ISCTE-IUL, Lisboa
Luís Filipe Mendes Marques	MOSS	Secure de-duplication in mobile environments	Dec 2013	Juri	ISCTE-IUL, Lisboa
Luís Carlos Bernardino Rosa	MIG	Android data storage techniques	Dec 2012	Juri	ISCTE-IUL, Lisboa
Manuel Francisco Videira Delgado	MOSS	Fighting the Economic Crime using Digital weapons	May 2012	Juri	ISCTE-IUL, Lisboa
Rui Spranger Rosa	MOIS	Agile Software Development methods using open-source: the NovaSBE case	Mar 2012	Juri	IPS/ESCE, Setubal
David Diogo Ralo	MIG	Identity management delegation - a research case of the portuguese public administration	Oct 2011	Juri	ISCTE-IUL, Lisboa
Vânia Marina Paulos Pereira	MIG	Advantages and Disadvantages of Applicational Tests outsourcing	Nov 2010	Juri	ISCTE-IUL, Lisboa

## ORGANISATION COMPETENCIES

### EVENT ORGANISATION AND COORDINATION

2017

Member of the program committee, paper reviewer for the conference "12ª Conferencia Ibérica de Sistemas y Tecnologías de Información (CISTI 2017)", 21 - 24 June 2017, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference "7th International Conference on Cloud Computing and Services Science (CLOSER 2017)", 24 - 26 April 2017, Porto, Portugal

Member of the program committee, paper reviewer for the conference "9º Simpósio de Informática 2015 (IN-FORUM 2017)", TBD 2017, Aveiro, Portugal

Member of the program committee, paper reviewer for the conference "IADIS International Conference Theory and Practice in Modern Computing (TPMC 2017)", 20 - 23 July, 2017, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference "17ª Conferência da Associação Portuguesa de Sistemas de Informação(CAPSI 2017)", 6 - 7 June 2017, Lisboa, Portugal

2016

Member of the program committee, paper reviewer for the conference "16ª Conferência da Associação Portuguesa de Sistemas de Informação(CAPSI 2016)", 22 - 24 September 2016, Porto, Portugal

Member of the program committee, paper reviewer for the conference "11ª Conferencia Ibérica de Sistemas y Tecnologías de Información (CISTI 2016)", 15 - 18 June 2016, Canarias, Spain

Member of the program committee, paper reviewer for the conference "6th International Conference on Cloud Computing and Services Science (CLOSER 2016)", 23 - 25 April 2016, Roma, Italy

Member of the program committee, paper reviewer for the conference "8º Simpósio de Informática 2015 (IN-FORUM 2016)", 8 - 9 September 2016, Lisboa, Portugal

2015

Member of the organization and program committee, paper reviewer for the conference "15ª Conferência da Associação Portuguesa de Sistemas de Informação(CAPSI 2015)", 2 - 3 October 2015, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference "5th International Conference on Cloud Computing and Services Science (CLOSER 2015)", 20 - 22 May 2015, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference "7º Simpósio de Informática 2015 (IN-FORUM 2015)", 7 - 8 September 2015, Covilhã, Portugal

Member of the program committee, paper reviewer for the conference "IADIS International Conference Theory and Practice in Modern Computing (TPMC 2015)", 22 - 24 July, 2015, Las Palmas de Gran Canaria, Spain

2014

Member of the program committee, paper reviewer for the conference "14ª Conferência da Associação Portuguesa de Sistemas de Informação(CAPSI 2014)", 3 - 4 September 2014, Santarém, Portugal

Member of the program committee, paper reviewer for the conference "12ª Conferência Ibero Americana- WWW/INTERNET 2014 (CIAWI 2014)", 25 - 27 October 2014, Porto, Portugal

Member of the program committee, paper reviewer for the conference "4th International Conference on Cloud Computing and Services Science (CLOSER 2014)", 3 - 5 April 2014, Barcelona, Spain

Member of the program committee, paper reviewer for the conference "16th International Conference on Enterprise Information Systems (ICEIS 2014) - Doctoral Consortium", 27 - 30 April 2014, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference “21.ª Conferência Internacional de Telecomunicações (ICT 2014)”, 4 - 7 May 2014, Lisboa, Portugal

Member of the program committee, paper reviewer for the conference “6º Simpósio de Informática 2014 (IN-FORUM 2014)”, 4 - 5 September 2014, Porto, Portugal

## 2013

Cooperation in the organisation of BSidesLisbon 2013, 4th October 2013, Lisbon, Portugal

Member of the program committee, paper reviewer for the conference “13ª Conferência da Associação Portuguesa de Sistemas de Informação(CAPSI 2013)”, 4 - 5 October 2013, Évora, Portugal

Member of the program committee, paper reviewer for the conference “5th. International Conference on Knowledge Management and Information Sharing (KMIS 2013) - Special Session on Information Security Intelligence for Business Decision Makers - ISI-BDM 2013”, 19 - 22 September 2013, Vilamoura - Algarve, Portugal

Member of the program committee, paper reviewer for the conference “5º Simpósio de Informática 2013 (IN-FORUM 2013)”, 5 - 6 September 2013, Évora, Portugal

Member of the program committee, paper reviewer for the conference “IADIS International Conference Theory and Practice in Modern Computing (TPMC 2013)”, 22 - 24 July, 2013, Prague, Czech Republic

Member of the program committee, paper reviewer for the conference “3rd International Conference on Cloud Computing and Services Science (CLOSER 2013)”, 8 - 10 May, 2013, Aachen, Germany

Member of the program committee, paper reviewer for the conference “IASTED Parallel and Distributed Computing and Systems (PDCS 2013)”, 11 - 13 February, 2013, Innsbruck, Austria

## 2012

Member of the program committee, paper reviewer for the conference “Conferência IADIS Ibero Americana WWW/INTERNET 2012 (CIAWI 2012)”, 18 - 20 October, 2012, Madrid, Spain

Member of the program committee, paper reviewer for the conference “4º Simpósio de Informática 2012 (IN-FORUM 2012)”, 6 - 7 September, 2012, Caparica, Portugal

Member of the program committee, paper reviewer for the conference “OWASP AppSec Research Europe 2012 (APPSECEU 2012)”, 10 - 12 July, 2012, Athens, Greece

Member of the program committee, paper reviewer for the conference “2nd International Conference on Cloud Computing and Services Science (CLOSER 2012)”, 18 - 21 April, 2012, Porto, Portugal

## 2011

Member of the program committee for the conference “11ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2011)”, Lisbon, Portugal, 19-21 October, 2011 (URL: <http://pascal.isseg.utl.pt/~cap-si2011/index.html>)

Member of the program committee, paper reviewer for the 1st. International Conference on Cloud Computing and Services Science (CLOSER 2011), Noordwijkerhout, The Netherlands, 7-8 May, 2011 (URL: <http://www.closer.scitevents.org/CLOSER2011/home.asp>)

Member of the program committee, paper reviewer for the EUROCON2011 International Conference on Computer as a Tool, Lisbon, Portugal, 27-29 April 2011 (URL: <http://www.eurocon2011.it.pt/Default.aspx>)

Member of the program committee, paper reviewer for the IADIS International Conference on Telecommunications, Networks and Systems 2011 (TNS 2011), Rome, Italy, 20-22 July, 2011 (URL: <http://www.tns-conf.org/>)

## 2010

Chair and member of the organisation committee for the 2nd. Ibero-American Web Application Security conference (IBWAS'10), December 2010, Lisbon, Portugal



Organisation of the dissemination event "How I met your Girlfriend", talk presented by Samy Kamkar, at ISCTE-IUL, October 2010, Lisbon, Portugal

Organisation of the dissemination event "WebAppSec day @ ISCTE-IUL", presented at ISCTE-IUL, July 2010, Lisbon, Portugal

2009

Chair and member of the organisation committee of the 1st Iberic Web Application Security conference (IB-WAS'09), December 2009, Madrid, Spain

Member of the program committee of the IADIS International Multi Conference on Computer Science and Information Systems – Telecommunications, Networks and Systems (MCCSIS-TNS 2009), 2009, Algarve, Portugal

2007

Member of the program committee of the 3rd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution (AXMEDIS 2007), 2007, Barcelona, Spain

2005

Chair and member of the organisation committee of the 2nd International ODRL Workshop 2005, 2005, Lisbon, Portugal

Paper reviewer for the "Special Issue on European Projects in Visual Representation Systems and Services", Elsevier, published in the fall of 2005

2004

Member of the program committee of the 1st International ODRL Workshop 2004

1997

Organisation and participation of COST 237 - Workshop 97 - From Network Services to Multimedia Services, Dezembro 1997, Lisbon

## PRESENTATIONS

### INVITED ORAL PRESENTATIONS

2016

"New technologies, New challenges: Security and Privacy", presented at Semana da Investigação 2016, ISCTE-IUL, Lisboa, June 2016

"OWASP Mobile Top 10 - The ten main risks in mobile application development", presented at Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, May 2016

2015

"Let's take a selfie? [or... how our privacy died and no one has warned us about it]", Escola Superior de Ciências Empresariais, Instituto Politécnico de Setúbal, Setúbal, October 2015

"OWASP Mobile Top 10 - The ten main risks in mobile application development", Section 2015, Lisboa, October 2015

2014

"OWASP - Open Web Application Security Project: Contributing for a safer (web) application World", presented at SIEMENS, Lisboa, October 2014

"OWASP e a Segurança Aplicacional para a Web - A contribuição da OWASP para aplicações mais seguras!", presented at Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, June 2014

2013

"New directions for Rights Management Systems (or "Making Rights Management Systems useful for some real-world problems")", presented at 1st. SUWMIAC – Summer Workshop Microsoft – ISCTE-IUL on Applied Computing, Microsoft Portugal, Lisbon, September 2013

"The Ten Most Critical Web Applications Security Risks", presented at Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, March 2013

2012

"Social networks security and privacy", presentation at the Instituto Politécnico de Castelo Branco, Escola Superior de Tecnologia, 19th October 2012, Castelo Branco, Portugal

"The OWASP contribution for the secure web applications development", presented at ISELTech 2012, in Instituto Superior de Engenharia de Lisboa (ISEL), 23rd May 2012, Lisbon, Portugal

"Basic principles of on-line security", presented at the Information Security Week of Siemens Portugal, SA, 11th May 2012, Alfragide, Portugal

2011

"To DRM or not to DRM?", presented at the Instituto Politécnico de Setúbal, in Escola Superior de Ciências Empresariais, 6th December 2011, Setúbal, Portugal

"Portuguese Web Application Security Assessment: Are we safe out there?", presented at Just4Meeting - Information Security Meeting, 1st July 2011, Cascais, Portugal

"Security \* Software \* University \* Company", presented at the Forum of ISCTE-IUL School of Technology and Architecture (FISTA 2011), at ISCTE-IUL, 3rd May 2011, Lisbon, Portugal

"National Web Applications vulnerability analysis", presented at the Confraria Security&IT, 26th January 2011, Lisbon, Portugal

2010

"Security and Privacy in Social Networks", presented at the Instituto Politécnico de Setúbal, Escola Superior de Ciências Empresariais, 3rd November 2010, Setúbal, Portugal

2009

"\*AMP - Web-based applications development", presented at Escola Secundária João de Barros, 12th November 2009, Corroios, Portugal

"Web-based and Rich Internet Applications Security", presented at the IX Communication and Information Technologies Conference, presented at Escola Superior de Tecnologia de Viseu, 13th May 2009, Viseu, Portugal

"OWASP Top 10", presented at Instituto Politécnico de Castelo Branco, April 2009, Castelo Branco, Portugal

"Open Web Applications Security Project - Projects, Documents and Tools", presented at Universidade da Beira Interior, 25th March 2009, Covilhã, Portugal

2008

"Web 2.0 - Software as a Service (SaaS)", presented at Instituto Politécnico de Setúbal, Escola Superior de Ciências Empresariais, December 2008, Setúbal, Portugal

"C.I.A. - the pillars of Information Security", presented at Escola Secundária João de Barros, December 2008, Corroios, Portugal

2006

"Digital Certificates ... a question of trust!", presented at ISCTE-IUL, Lisbon, May 2006

"Web-services - the new web", presented at Instituto Politécnico de Setúbal, Setúbal, May 2006

2005

"Web-Services - Development of web-based distributed applications", presented at ISCTE-IUL, Lisbon, June 2005

"Development of web-based Enterprise Applications", presented at ISCTE-IUL, Lisbon, November 2005

2004

"Microsoft .Net and Sun J2EE platforms", presented at Instituto Politécnico de Setúbal, Setúbal, May 2004

2002

"DRM - Digital Rights Management", presented at Instituto Politécnico de Setúbal, Setúbal, May 2002

2001

"e-Business Technologies", presented at Instituto Politécnico de Setúbal, Setúbal, January 2001

2000

"e-Business", presented at Instituto Politécnico de Setúbal, Setúbal, June 2000

1999

"The e-commerce impact on digital content", presented at Instituto Politécnico de Castelo Branco, Castelo Branco, May 1999.

"The e-commerce impact in Portugal", presented at Câmara de Comércio Luso-Sueca, Lisbon, May 1999.

1998

"Using Java to crack the DES challenge", presented at the 1st Linux Workshop, Lisbon, March 1998.

## **SCIENTIFIC MEETING PRESENTATIONS**

2011

Joaquim, M., Serrao, C., "Intellectual Property on Knowledge based content - Challenges to Science Communication", European Conference on Educational Research 2011 (ECER2011), 12-16 September 2011, Berlin, Germany

Joaquim, M., Serrao, C., "FAIR USE ON KNOWLEDGE-BASED CONTENT IN ACADEMIA", Encontro Internacional de Educação, Currículo e Didáticas 2011, 27-29 September 2011, Açores, Portugal

2010

Serrão C., "Is the Web at Risk?", World Internet Policy Project (WIP2) Conference, Lisboa, Portugal, 6-7 July, 2010

Marques J., Serrão C., "Rights Management in the Educational context - A new challenge to digital content", World Internet Policy Project (WIP2) Conference, Lisboa, Portugal, 6-7 July, 2010

## **TECHNICAL COMPETENCIES**

Mobile development: RIM/Blackberry, Windows Phone and Android. Appcelerator Titanium.

Web-based development using XAMP, WAMP or LAMP (including Drupal, Joomla or Wordpress). Node.JS.

Development with Microsoft .NET and J2EE

Operating Systems: MsDOS, Unix, Linux (Suse, Ubuntu, Debian), Xenix, all Windows flavours and Mac OS X.

Programming Languages: C, C++, Pascal, Prolog, LISP, Informix-4GL, Visual C++, Visual Basic, COBOL, SQL, Java, Javascript, C# and PHP.

System analysis: Yourdon, OMT (Object Modelling Technics) and UML (Unified Modelling Language). Work with Rational tools (acquired by IBM) (Rational Rose, Requisite Pro, SoDa) and Sybase modelling tools (PowerDesigner).

Productivity tools: Word, Excel, PowerPoint, Access, Outlook (Windows and Mac OS X), Pages, Numbers e Key-note (Mac OS X), OpenOffice (or NeoOffice and LibreOffice) (Windows, Linux e Mac OS X)

Web-based development languages: HTML, CSS, VRML, CGI, Java, JavaScript, PHP, ASP, others.

Graphical tools: 3DStudio, Photoshop, Illustrator, Gimp, Inkscape, Corel Draw, others.

Project management tools: Microsoft Project, Microsoft Project Server, Merlin (Mac OS X), others.

Other tools: Leonardo, CMMS, SPSS, PVM, Win PVM and others.

## PAPERS, BOOKS AND OTHER PRESENTATIONS

### PAPERS IN INTERNATIONAL JOURNALS WITH SCIENTIFIC REFEREES

2016

Vieira, T. & Serrão, C. (2016). Web Applications Security and Vulnerability Analysis Financial Web Applications Security Audit – A Case Study. International Journal of Innovative Business Strategies - ijibs. 2 (2), 86-94, ISSN 2046-3626, <http://infonomics-society.org/ijibs/published-papers/volume-2-2016/>

2014

Dinis, B. & Serrão, C. (2014). Using PTES and open-source tools as a way to conduct external footprinting security assessments for intelligence gathering. Journal of Internet Technology and Secured Transactions (JITST). 3 (3/4), 271-279, ISSN 2046-3723, <http://www.infonomics-society.org/JITST/Contents%20Page%20Volume%203%20Issues%203%20and%204>

Serrão, C., Carvalho, H. & Carvalho, N. (2014). Crowdsourcing as a way to improve coastline conditions sharing. International Journal of Digital Society (IJDS). 5 (3/4), 878-886, ISSN 2040-2570, <http://www.infonomics-society.org/IJDS/Contents%20Page%20Volume%205%20Issues%203%20and%204>

2013

Marques, J., Serrão, C., "Improving the user content privacy on Social Networks using Rights Management Systems", Annals of Telecommunications, Springer, August 2013, ISSN 0003-4347, <http://dx.doi.org/10.1007/s12243-013-0388-1>

Ricardo, A., Serrão, C., "Comparison of existing open-source tools for Web crawling and indexing of free Music", Volume 18, Issue 1, January 2013 - Journal of Telecommunications.. Retrieved June 27, 2013, from <https://sites.google.com/site/journaloftelecommunications/volume-18-issue-1-january-2013>

2011

Carlos Serrão, Eva Rodriguez, Jaime Delgado, Approaching the rights management interoperability problem using intelligent brokerage mechanisms, Computer Communications, Volume 34, Issue 2, 15 February 2011, Pages 129-139, ISSN 0140-3664, 10.1016/j.comcom.2010.04.001. (<http://www.sciencedirect.com/science/article/pii/S0140366410001696>)

2010

Castro, H.; Alves, A.P.; Serrão, C.; Caraway, B.; , "A New Paradigm for Content Producers," Multimedia, IEEE , vol. 17, no.2, pp.90-93, April-June 2010, doi: 10.1109/MMUL.2010.26 (<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5471683&isnumber=5471675>)

2008

Torres V., Serrão C., Dias M., Delgado J., "Open DRM and the Future of Media," IEEE MultiMedia, vol. 15, no. 2, pp. 28-36, Apr.-June 2008, doi:10.1109/MMUL.2008.38, ISSN 1070-986X

2006

Serrão C., Torres V., Delgado J., Dias M., "Interoperability Mechanisms for registration and authentication on different open DRM platforms", in International Journal of Computer Science and Network Security, Vol. 6, Number 12, Pages 291-303, ISSN 1738-7906, December, 2006

2005

Serrão C., "Music-4you.com – Digital Music E-Commerce Case Study", in IADIS International Journal on Internet/WWW, Volume 3, Issue 1, ISSN 1645-7641, 2005

Serrão C., Dias M., Kudumakis P., "From OPIMA to MPEG IPMP-X - A standard's history across R&D projects", in Special Issue on European Projects in Visual Representation Systems and Services, Image Communications, Volume 20, Issue 9-10, Pages 972-994, Elsevier, ISSN 0923-5965, 2005

## PAPERS IN SCIENTIFIC CONFERENCES

2016

Serrão, C. & Rocha, D. (2016). Secure and trustworthy remote javascript Execution. Proceedings of the 14th International Conference on e-Society 2016. 39-46, ISBN 978-989-8533-48-7, <http://esociety-conf.org/old-conferences/2016/>

Santos, T. & Serrão, C. (2016). Secure Javascript Object Notation (SecJSON): Enabling granular confidentiality and integrity of JSON documents. 11th International Conference for Internet Technology and Secured Transactions (ICITST-2016). 329-334, ISBN 978-1-908320-73-5, 10.1109/ICITST.2016.7856724, <http://icitst.org/>

Vieira, T. & Serrão, C. (2016). Web security in the Finance Sector: Analysing the security of financial web applications – a case study. 11th International Conference for Internet Technology and Secured Transactions (ICITST-2016). 255-259, ISBN 978-1-908320-73-5, 10.1109/ICITST.2016.7856707, <http://icitst.org/>

2015

Serrão, C., Carvalho, H. & Carvalho, N (2015). MusicBeetle - Intelligent Music Royalties Collection and Distribution System. 5th International Conference on Cloud Computing and Services Science, CLOSER 2015. 406-413, ISBN 978-989-758-104-5, 10.5220/0005486304060413, <http://www.scitepress.org/DigitalLibrary/Link.aspx?doi=10.5220/0005486304060413>

Serrão, C., Coelho, A., Carvalho, H. & Carvalho, N (2015). SiUinde – A collaborative platform to share conditions for near-the-shore activities. Information Society (i-Society), 2014 International Conference on. 57-62, ISBN 978-1-908320-36-0, 10.1109/i-Society.2014.7009011, [http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7009011&filter%3DAND%28p\\_IS\\_Number%3A7008990%29](http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7009011&filter%3DAND%28p_IS_Number%3A7008990%29)

Marques, J. & Serrão, C. (2015). ARMS – A NEW APPROACH TO CONTROL CONTENT SHARING AND RIGHTS DISTRIBUTION. 7th annual International Conference on Education and New Learning Technologies (EDULEARN15). 5597-5607, ISSN 2340-1117, ISBN 978-84-606-8243-1, <http://iated.org/edulearn/>

Marques, J., Serrão, C. & Metrolho J. (2015). Content related rights transmission with MPEG-21 in the educational field. 14th European Conference on e-Learning (ECEL-2015). 329-338, ISBN 978-1-5108-1431-8, <http://academic-conferences.org/ecel/ecel2015/ecel15-home.htm>

Teodoro, N, Luis Gonçalves & Serrão, C. (2015). NIST CyberSecurity Framework Compliance - A Generic Model for Dynamic Assessment and Predictive Requirements. 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-15). III, 418-425, 10.1109/Trustcom.2015.402, [http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7345310&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs\\_all.jsp%3Farnumber%3D7345310](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=7345310&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxppls%2Fabs_all.jsp%3Farnumber%3D7345310)

2014

Dinis B., Serrão C., "External footprinting security assessments - Combining the PTES framework with open-source tools to conduct external footprinting security assessments", in proceedings of the International Conference on Information Society (i-Society 2014), London, UK, 10th - 12th November 2014, to be published

Coelho A., Serrão C., Carvalho N., Carvalho H., "SiUinde – A collaborative platform to share conditions for near the shore activities", in proceedings of the International Conference on Information Society (i-Society 2014), London, UK, 10th - 12th November 2014, to be published

2013

Gamito M., Serrão C., "Building an Integrated System for the Management of Scientific Nature Events through Open Source Software integration", in proceedings of the 2013 World Conference on Information Systems and Technologies (WorldCIST'13), Algarve, Portugal, 27th - 30th March 2013 ([http://link.springer.com/chapter/10.1007/978-3-642-36981-0\\_71](http://link.springer.com/chapter/10.1007/978-3-642-36981-0_71))

## 2012

Marques J., Serrão C., "ARMS – A new approach to rights management in educational field", in proceedings of 5th International Conference of Education, Research and Innovation (ICERI2012), Madrid, Spain, 19th – 21st November 2012 (<http://library.iated.org/view/MARQUES2012ARM>)

Marques J., Serrão C., "Rights Management and Technological Protection Measures in Educational Field", in proceedings of the 11th European Conference on e-Learning ECEL-2012, Groningen, Netherlands, 26th- 27th October 2012

Marques J., Serrão C., "Technological Protection Measures on Knowledge based content in Academia", in proceedings of the Interactive Collaboration Learning International Conference (ICL2012), Villach, Austria, 26th – 28th September 2012 ([http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=6402177](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6402177))

## 2011

Gamito, M., Serrao, C., "Comparação de Software Open-source para Gestão de Eventos de Natureza Científica", 11ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2011), pp. 38, 19-21 Outubro 2011, Lisboa, Portugal, ISBN: 978-972-8862-12-1

Rodrigues, C., Serrao, C., "Sistemas de Apoio à Tomada de Decisão de Treinadores desportivos – uma análise ao Estado da Arte", 11ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2011), pp. 72, 19-21 Outubro 2011, Lisboa, Portugal ISBN: 978-972-8862-12-1

Carvalho, S., Serrao, C., "Agregação e categorização de informação desportiva baseada em conteúdos gerados por utilizadores", 11ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2011), pp. 73, 19-21 Outubro 2011, Lisboa, Portugal, ISBN: 978-972-8862-12-1

Martins, M., Serrao, C., "Sistemas de Gestão de Conteúdos Web para a Criação de redes sociais on-line: uma análise comparativa", 11ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2011), 19-21 Outubro 2011, Lisboa, Portugal, ISBN: 978-972-8862-12-1

Teodoro, N.; Serrão, C.; , "Assessing the Portuguese Web applications security," World Congress on Internet Security (WorldCIS) 2011, vol., no., pp.21-26, 21-23 Feb. 2011, E-ISBN: 978-0-9564263-7-6, Print ISBN: 978-1-4244-8879-7, (<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5749875&isnumber=5749844>)

Teodoro, Nuno; Serrao, Carlos; , "Web application security: Improving critical web-based applications quality through in-depth security analysis," International Conference on Information Society (i-Society 2011), vol., no., pp.457-462, 27-29 June 2011, Print ISBN: 978-1-61284-148-9, (<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5978496&isnumber=5978433>)

Ricardo, Andre; Serrao, Carlos; , "Using open-source tools for web crawling and indexing of open content," International Conference on Information Society (i-Society 2011), vol., no., pp.429-434, 27-29 June 2011, Print ISBN: 978-1-61284-148-9, (<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5978485&isnumber=5978433>)

Teodoro N., Serrao C., "Segurança na WWW portuguesa: realidade ou ficção?", INForum 2011 – Terceiro Simpósio de Informática, pp. 770-775, 8-9 September 2011, Coimbra – Portugal, ISBN: 978-989-96001-5-7

Joaquim, M., Serrao, C., "DIGITAL RIGHTS MANAGEMENT IN THE EDUCATIONAL CONTEXT - AN OLD/NEW CHALLENGE", Proceedings of the IADIS International Conference Information Systems, Avila, Spain, 11-13 March 2011, ISBN: 978-972-8939-47-2

Joaquim, M., Serrao, C., "ACADEMIC CONTEXT and Rights enforcement on Knowledge based content", 4th International Conference of Education, Research and Innovations (ICERI2011), pp. 618-628, Madrid, Spain, 14-16 November 2011, ISBN: 978-84-615-3324-4 (<http://library.iated.org/view/MARQUES2011ACA>)

## 2010



Teodoro N., Serrão C., "Automating Web Applications Security Assessments through Scanners", in Proceedings of the OWASP 2nd. Ibero-American Web Application Security Conference (IBWAS'10), Lisboa, Portugal, 16-17 December, 2010

Serrão C., Teodoro N., Marques J., "Desenvolvimento de Aplicações e Sistemas de Informação para a World Wide Web – uma actividade de elevado risco", in Proceedings of the 10ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI 2010), Viana do Castelo, Portugal, 20-22 October, 2010

Serrão C., "Is the Web at Risk?", World Internet Policy Project (WIP2) Conference, Lisboa, Portugal, 6-7 July, 2010

Marques J., Serrão C., "Rights Management in the Educational context - A new challenge to digital content", World Internet Policy Project (WIP2) Conference, Lisboa, Portugal, 6-7 July, 2010

## 2009

Teodoro, N., Serrão, C., "Web Applications Security Assessment in the Portuguese World Wide Web Panorama", in Proceedings of the 1st. Iberic Web Applications Security Conference (IBWAS09), Madrid, Spain, 11-12 December, 2009

Marques J., Serrão C., Afonso A., "Digital rights management in the educative context – An approach", in Proceedings of the European Conference on Educational Research (ECER2009), Vienna, Austria, 25-26 September, 2009

Serrão C., Marques J., Mendes A., "Protecting Intellectual Property Rights (IPR) on E-Learning Systems", in Proceedings of the International Conference on Education and New Learning Technologies (EDULEARN2009), Barcelona, Spain, 6-8 July, 2009

Serrão C., Marques J., Mendes A., "Rights Management on Knowledge-based Digital Content", in Proceedings of the 4th.Iberic Conference on Information Systems and Technologies (CISTI2009), Póvoa do Varzim, Portugal, 17-20 June, 2009

## 2008

Serrão C., Dias M., Delgado J., "Secure License Management for Interoperable DRM Systems", in Proceedings of the IADIS International Conference Information Systems (ICIS2008), Algarve, Portugal, 9-11 April, 2008.

## 2007

Serrão, C., Serra A., Dias M., Delgado J., "Key Management in open DRM Platforms", in the Proceedings of the 3rd. International Conference of Automated Production of Cross Media Content for Multi-channel Distribution (AXMEDIS2007), Barcelona, Spain, 28-30 November, 2007

Serrão, C., Serra A., Dias M., Delgado J., "Secure License Management - Management of Digital Object Licenses in a DRM environment", In Proceedings of the International Conference on Security and Cryptography (SECRYPT2007), Barcelona, Spain, 28-31 July, August, 2007

Serrão, C., Serra A., Dias M., Delgado J., "PKI as a way to leverage DRM interoperability", In Proceedings of the IADIS International Conference on Telecommunications, Networks and Systems 2007 (TNS2007), Lisboa, Portugal, 3-5 July, 2007

## 2006

Serrão, C., Serra A., Dias M., Delgado J., "Protection of MP3 Music Files Using Digital Rights Management and Symmetric Ciphering", in the Proceedings of the 2nd. International Conference of Automated Production of Cross Media Content for Multi-channel Distribution (AXMEDIS2006), Leeds, United Kingdom, 13-15 December, 2006

Serrão C., Dias M., Delgado J., "Using Service-oriented Architectures towards Rights Management interoperability", in Proceedings of the International Joint Conferences on computer, Information and Systems Sciences and Engineering (CISSE06), University of Bridgeport, USA, 4-14 December, 2006

Clara M., Serrão C., "Describing Accoustic Fingerprinting Technology Integration for Audio Monitoring Systems", in Proceedings of the International Joint Conferences on computer, Information and Systems Sciences and Engineering (CISSE06), University of Bridgeport, USA, 4-14 December, 2006

Pacheco A., Serrão C., "Developing secure Web-applications – Security criteria for the development of e-Democracy web-applications", in Proceedings of the International Joint Conferences on computer, Information and Systems Sciences and Engineering (CISSE06), University of Bridgeport, USA, 4-14 December, 2006

Carvalho H., Serrão C., Serra A., Dias M., "Flexible Access to ESA Earth Observation data using JPEG2000 and DRM", in Proceedings of the Fourth Conference on Imaging Information Mining (ESA-EUSC2006), Madrid, Spain, 27-28 November, 2006

Serrão C., Marques J., Dias M., Delgado J., "Open-Source Software as a Driver for Digital Content E-Commerce and DRM interoperability", in Proceedings of the Europe-China Conference on Intellectual Property in Digital Media – Optimisation of Intellectual Property in Digital Media (IPDM06), Shangai, China, 18-19 October, 2006

Serrão C., Fonseca P., Dias M., Delgado J., "The Web-Services growing importance for DRM interoperability", in Proceedings of the IADIS International Conference WWW/Internet 2006, Múrcia, Spain, 5-8 October, 2006

Serrão, C., Dias M., Serra A., Carvalho H., "Accessing Earth Observation data using JPEG2000", in Proceedings of the Symposium on Computational Modelling of Objects Represented in Images (ComplImage2006), Coimbra, Portugal, 20-21 October, 2006

Serrão, C., Dias L., Serra A., Dias M., "JPEG2000 Image Compression and Visualization for Desktop and Mobile Clients", in Proceedings of the Atlantic Europe Conference on Remote Imaging and Spectroscopy (AECRIS2006), International Journal of Internet Protocol Technology, Preston, United Kingdom, 11-12 September, 2006

Zenida P., Sequeira M., Henriques D., Serrão C., "Zás – Aspect-Oriented Authorization Services", in Proceedings of the First International Conference on Software and Data Technologies (ICSOFT 2006), Setúbal, Portugal, 11-14 Setembro, 2006

Pacheco A., Serrão C., "Small Screen rendering Web-Browser comparison – when web content is too large to fit the screen", in Proceedings of the International Conference on e-Business (ICE-B2006), Setúbal, Portugal, 7-10 August, 2006

Pimenta F., Serrão C., "Using OMA DRM 2.0 Protected Content – Ogg Vorbis protected audio under Symbian OS", In Proceedings of the International Conference on Security and Cryptography (SECRYPT2006), Setúbal, Portugal, 7-10 August, 2006

Serrão C., Dias M., Delgado J., "Digital Object Rights Management – Interoperable client-side DRM middleware", In Proceedings of the International Conference on Security and Cryptography (SECRYPT2006), Setúbal, Portugal, 7-10 August, 2006

## 2005

Serrão C., Fonseca P., "Can Digital Content E-Commerce profit from P2P Networks", in Proceedings of the IADIS e-Commerce 2005, Porto, Portugal, 15-17 Dezembro, 2005

Serrão C., Dias M., Delgado J., "Bringing DRM interoperability to digital content rendering applications", in Proceedings of the CISSE05 – The International Joint Conferences on Computer, Information, and System Sciences, and Engineering, Springer, ISBN: 978-1-4020-5260-6, University of Bridgeport, USA, 10-20 Dezembro, 2005

Serrão C., Vilas-Boas A., Gomes F., Santos P., Quaresma R., "Projecto INside – Uma abordagem aos novos desafios com que as organizações de projectos são confrontadas", in Proceedings of the 6ª Conferência da Associação Portuguesa de Sistemas de Informação (CAPSI2005), Bragança, Portugal, 26-28 Outubro, 2005

Serrão C., Dias M., Delgado J., "Using ODRL to express rights for different content usage scenarios", in Proceedings of the ODRL2005 – 2nd International ODRL Workshop 2005, Lisboa, Portugal, 7-8 July, 2005

Serrão C., Serra A., Dias M., "HICOD2000 – Integrated System for Coding, Protection and Trading of Earth Observation Products in JPEG2000", in Proceedings of the Fifth IASTED International Conference on Visualization, Imaging and Image Processing (VIIP2005), Benidorm, Spain, September 2005

Guth S., Iannella R., Serrão C., "ODRL workshop 2005 report", INDICARE, July 2005 ([http://www.indicare.org/tiki-read\\_article.php?articleId=126](http://www.indicare.org/tiki-read_article.php?articleId=126))

Serrão C., Serra A., Dias M., "Using JPEG2000 to encode, protect and trade Earth Observation data", in Proceedings of the 14th European Colloquium on Theoretical and Quantitative Geography (ECTQG'05), Tomar, Portugal, 9-13 September, 2005

Serrão C., Dias M., Delgado J., "Using Web-Services to Manage and Control Access to Multimedia Content", in Proceedings of The 2005 International Symposium on Web Services and Applications (ISWS05), Las Vegas, USA, 2005

Serrão C., Marques J., "Uma abordagem à gestão de direitos digitais no contexto educativo", in Proceedings of the VIII Congresso SPCE 2005, Castelo Branco, Março, 2005

## 2004

Serrão C., "Open Secure Infrastructure to control User Access to multimedia content", in Proceedings of the 4th. International Conference on Web Delivering of Music (WEDELMUSIC2004), Barcelona, Spain, 2004

Serrão C., Marques J., "Digital Music Electronic Commerce - Addressing the super distribution model ", in Proceedings of the 1st. International Conference on E-Business and Telecommunication Networks (ICETE2004), Setúbal, Portugal, 2004

Serrão C., Marques J., "Comércio Electrónico de Música Digital - Abordagem ao Modelo de Super-Distribuição", in Proceedings of the Conferência Ibero-Americana IADIS Internet/WWW 2004, Madrid, Spain, October, 2004

Marques J., Serrão C., "Enabling Digital Content Protection on Super-Distribution Models", in Proceedings of the International Workshop for Technology, Economy, Social and Legal Aspects of Virtual Goods (Virtual Goods 2004), Ilmenau, Germany, 27-29 May, 2004

Serrão C., Siegert G., "Open Secure Infrastructure to control User Access to multimedia content", in Proceedings of the Second International Workshop on Security In Information Systems (ICEIS2004-WOSIS2004), Porto, Portugal, 13 April, 2004

Serra A., Dias L., Serrão C., Dias M., Trezentos P., "Parallel JPEG2000 Encoding on a Beowulf Cluster", in Proceedings of the IADIS International Conference Applied Computing 2004 (IADIS 2004 Applied Computing), Lisboa, Portugal, 23-26 March, 2004

Serrão C., Siegert G., "An Open-Source Approach to Content Protection and Digital Rights Management in Media Distribution Systems", in Proceedings of the 8th. Annual international conference of the Center of Tele-Information, Technical University of Denmark (8th Annual CTI Conference), Denmark, 4-5 December, 2004

## 2003

Serrão C., Serra A., Fonseca P., Dias M., "A Method for Protecting and Controlling Access to JPEG2000 Images", in Proceedings of the International Society for Optical Engineering conference on Applications of Digital Image Processing XXVI (SPIE 2003) Annual Meeting, Volume 5203, pages 272-286, San Diego, California, United States of America, August, 2003

Serrão C., Serra A., Trezentos P., Dias L., Dias M., "Increasing the Performance of JPEG2000 encoding through high-performance computing", in Proceedings of the IASTED Visualization, Imaging and Image Processing VIIP2003, Acta Press, ISBN 0-88986-382-2, Banalmadena, Spain, 8-9 September, 2003

Serrão C., Dias F., Veiga O., "Divulgação de Resultados Eleitorais através da Internet", in Proceedings of the Conferência Ibero-Americana IADIS Internet-WWW2003, Algarve, Portugal, November, 2003

Serrão C., Neves D., Kudumakis P., Barker T., Balestri M., "OpenSDRM – An Open and Secure Digital Rights Management Solution", in Proceedings of the IADIS International Conference e-Society 2003, Lisboa, Portugal, 3-6 June, 2003

Alberti C., Romeo A., Matavelli M., Serrão C., "A Structured Description Language for Multimedia Content Protection", in Proceedings of the 4th. Conference on Telecommunications (CONFETELE 2003), Aveiro, Portugal, May, 2003

Serrão C., Neves D., Trezentos P., "Open Source Security Analysis: Evaluating security of Open Source Vs Closed Source Operating Systems", in Proceedings of the 5th. International Conference on Enterprise Information Systems (ICEIS 2003), Angers, France, 23-26 April, 2003

Serrão, C., Marques, J., Fonseca, P., "E-Commerce Payment Systems: An Overview", in Proceedings of the 5th. International Conference on Enterprise Information Systems (ICEIS 2003), Angers, France, 23-26 April, 2003

2002

Serrão, C., Marques, J., Kudumakis, P., Balestri, M., Barker, T., "Protecting Digital Music Delivery and Consumption using the OCCAMM Project Framework", in Proceedings of the 1st. International Conference on Web Delivering of Music (WEDELMUSIC2002), Darmstadt, Germany, 2002

Serrão, C., Dias, M., "Space and Planetary Imaging using JPEG2000", in the Proceedings of the 7th International Workshop on Simulation for European Space Programmes, ESA/ESTEC, Noordwijk, The Netherlands, 2002

Trezentos, P., Serrao, C., Neves, D., "Open Vs Closed source security analysis in DRM point of view", Interactive Broadcasting Workshop - IST concertation meeting , Brussels, Belgium, 10 September , 2002

Serrão C., Marques J., DIGIPIPE – A Pipeline Methodology for Digital Image Production and Protection, in the Proceedings of the 4th. EURASIP – IEEE Region 8 International Symposium on Video/Image Processing and Multimedia Communications (VIPromComm2002), Zadar, Croácia, 16-19 June, 2002

Serrão C., Marques J., "Im@gix – An Electronic Commerce Digital Image Bank", in the Proceedings of the 4th. International Conference on Enterprise Information Systems (ICEIS2002), Ciudad-real, Spain, 3-6 April, 2002

1999

Serrão C., Guimarães J., "Protecting Intellectual Proprietary Rights through Secure Interactive Contract Negotiation", in the Proceedings of the 4th. European Conference on Multimedia Applications, Services and Techniques (ECMAST'99), Madrid, Spain, 26-28 May, 1999

Serrão C., Guimarães J., Dias F., Escrutínio Eleitoral na Internet, Revista Portuguesa de Gestão, II-98, 1999

Serrão C., Guimarães J., Protecting Intellectual Property Rights through open networks, in Proceedings of the 1st. Conference on Telecommunications (CONFTELE'99), Sesimbra, Portugal, 1999

## **BOOKS AND BOOK CHAPTERS**

2015

Moura, J. & Serrão, C. (2015). Security and Privacy Issues of Big Data. Handbook of Research on Trends and Future Directions in Big Data and Web Intelligence, ISBN 9781466685055, <http://www.igi-global.com/book/handbook-research-trends-future-directions/124160>

2013

Serrão, C. & Marques, J. (2013). Improving Content Privacy on Social Networks Using Open Digital Rights Management Solutions. Procedia Technology - CENTERIS 2013 - Conference on ENTERprise Information Systems / ProjMAN 2013 - International Conference on Project MANagement/ HCIST 2013 - International Conference on Health and Social Care Information Systems and Technologies. 9, 405-410, <http://www.science-direct.com/science/article/pii/S2212017313001990>

Serrão, C. & Gamito, M. (2013). Building an Integrated System for the Management of Scientific Nature Events through Open Source Software Integration. Advances in Information Systems and Technologies. 763-772, ISBN 978-3-642-36980-3, [http://link.springer.com/chapter/10.1007/978-3-642-36981-0\\_71](http://link.springer.com/chapter/10.1007/978-3-642-36981-0_71)

2010

Serrao, C., Díaz, A., Cerullo, F., "Web Application Security", 2nd. OWASP Ibero-American Web Application Security Conference – IBWAS'2010, ISBN: 978-1-937087-00-5, ([https://www.owasp.org/images/1/13/lb-was10\\_proceedings.pdf](https://www.owasp.org/images/1/13/lb-was10_proceedings.pdf))

2009

Serrão C., Delgado J., Dias M., "iDRM - interoperable Digital Rights Management: Interoperability Mechanisms for Open Rights Management Platforms", VDM Verlag, 2009, ISBN: 978-3639182385

Serrao, C., Aguilera, V., & Cerullo, F. (2010). Web Application Security: Iberic Web Application Security Conference, IBWAS 2009, Madrid, Spain, December 10-11, 2009. Revised Selected Papers (Communications in Computer and Information Science) (p. 83). Springer. Retrieved from <http://www.amazon.co.uk/Web-Application-Security-Communications-Information/dp/3642161197>

Serrão C., Marques J., "Programação com PHP5.3", FCA-Editora de Informática, Novembro de 2009

2007

Serrão C., Marques J., "Programação com PHP5.2", FCA-Editora de Informática, Outubro de 2007

2006

Serrão C., Marques J., "Programação com PHP5", FCA-Editora de Informática, Outubro de 2006

2004

Serrão C., Marques J., "Programação com PHP4.3", FCA-Editora de Informática, Outubro de 2004

2001

Serrão C., Marques J., "Programação com PHP4", FCA-Editora de Informática, Outubro de 2001

2000

Serrão C., Marques J., "Programação com PHP", FCA-Editora de Informática, Setembro de 2000

## **OTHER PUBLICATIONS**

2011

R. Marinheiro, C. Serrão, "Segurança em Redes e Aplicações: Desafios e Perspectivas de Futuro", Comunicações - Revista da Associação Portuguesa para o Desenvolvimento das Comunicações, Ano 25, No. 199, pp. 67-68, May 2011

2010

Carlos Serrão, "A segurança das aplicações e sistemas de informação baseados na WWW - Mais do que a visão alcança", POSI Mag, Publicação do Curso de Pós-Graduação em Sistemas de Informação / Consórcio POSI, nº 3, pp. 32-35, Janeiro 2010, ISSN 1647-3094

Carlos Serrão, "DRM porque falhou?", POSI Mag, Publicação do Curso de Pós-Graduação em Sistemas de Informação / Consórcio POSI, nº 4, pp. 26-30, Maio 2010, ISSN 1647-3094

1999

Serrão C., E-Commerce: the business of the future, BI-LATERAL, Portuguese Chamber of Commerce, number 52, Summer 1999

Serrão C., Using Java and Linux to crack the DES challenge, Linux Gazette (<http://www.linuxgazette.com/issue46/serrao.html>), Issue 46, Outubro 1999

Serrão C., Extending the Java Security features - The Zero Knowledge protocol, <http://www.javauniverse.com>, 1997 (no longer available online)

Serrão C., The Java Language and its Security - Part 2, <http://www.javauniverse.com>, 1997 (no longer available online)

Serrão C., The Java Language and its Security - Part 1, <http://www.javauniverse.com>, 1997 (no longer available online)

## **CONTRIBUTIONS TO INTERNATIONAL STANDARDISATION EFFORTS**

Carlos Serrão, "Proposal for Registration, Authentication and Secure Communication Protocol between the Device and the External Device (XD) (DMP0468)", Digital Media Project, July 2005

Carlos Serrão, "Report on DMP Reference Software (Turin Meeting) (DMP0467)", Digital Media Project, July 2005

Carlos Serrão, "DMP Reference Software (DMP0452)", Digital Media Project, June 2005

Carlos Serrão, "Proposal for detailing the interaction between the PAV and the External Device (DMP0418)", Digital Media Project, April 2005

Carlos Serrão, "Comments on "Revised version of Chapter 6 of AD #3: Interoperable DRM Platform, Phase I" (DMP0417)", Digital Media Project, April 2005

Carlos Serrão, Miguel Dias and Jaime Delgado, "License Management for SAV (DMP0416)", Digital Media Project, April 2005

Carlos Serrão, "Integrated License Access Protocol (DMP0365)", Digital Media Project, March 2005

Carlos Serrão, "Local License Access protocol (DMP0364)", Digital Media Project, March 2005

Carlos Serrão, "Comments on "AD #1 - IDP-1 WD 2.0" (DMP0363)", Digital Media Project, March 2005

Carlos Serrão, "Contribution for the discussion about the DMP reference software (DMP0286) (DMP0311)", Digital Media Project, January 2005

Carlos Serrão, "License Access protocol (DMP0275)", Digital Media Project, December 2004

Carlos Serrão, "Device Identification and Authentication (DMP0250)", Digital Media Project, October 2004

Carlos Serrão, Miguel Dias, João Trindade, Pedro Fonseca (ADETTI), Panos Kudumakis (CRL), Filippo Chiariglione (CEDEO), "Answer to the DMP CfP (DMP0145) for Portable Audio and Video Devices (OpenSDRM) (DMP0216)", Digital Media Project, October 2004

Carlos Serrão, Panos Kudumakis, Claudio Alberti on behalf of MOSES, ENTHRONE and MEDIANET, "Joint answer to the MPEG-21 IPMP CfP", MPEG-21, July 2004

Serrão, C., "JPSEC - Introduction to OpenSDRM architecture and its applicability on JPSEC core experiments", contribution to ISO/IEC JTC 1/SC 29/WG1, document N2723, 2002

Serrão, C., Conan, V., Sadourny, Y., "Proposal to JPSEC - Protecting the JPEG2000 code-stream", contribution to ISO/IEC JTC 1/SC 29/WG1, document N2650, 2002