# Leovigildo Sánchez Casado

*Curriculum Vitae – March 2017*

---

## Professional Experience

**Nov 2016 – Present day**
**Integration engineer**, Nexthink, Madrid.
Integration of the *Nexthink* software with different tools, as *ServiceNow*, *Splunk*, *ArcSight* or *SCCM*, providing metrics and real time information about the activity of the endpoints (*end-user analytics*), following agile methodologies (*SCRUM*) and applying Test Driven Development (TDD).

**Jan 2015 – Oct 2016**
**Software developer**, Unit4 R&D Spain, Granada.
Integration of products developed in different technologies (VB6, C++, C#) under .NET framework and development of new features. Work as member of a multifunctional team, following agile methodologies (*SCRUM*) and applying Test Driven Development (TDD).

**Oct 2010 – Oct 2014**
**Researcher**, Univ. of Granada, Granada.
Research focused on network security and intrusion detection and response, principally in *ad hoc* networks. Development of intrusion detection systems using network simulators and Python. Development of NETA (*NETwork Attacks*), an open-source simulation framework based on the OMNeT++ tool. Author of some journal papers, two book chapters and several publications in national and international conferences.

**Nov 2013 – Feb 2014**
**Research stay in the *Distributed Systems Lab***, Univ. of Osnabrück, Osnabrück (Germany).
Development of attack detection systems in MANETs under the supervision of Dr. Nils Aschenbruck.

**Jun 2007 – May 2008**
**Initiation to Research Grant**, Univ. of Granada, Granada.
Research focused on the area of network security, specifically in automatic signature generation for Intrusion Detection Systems (IDS).

## Teaching Experience

**Oct 2010 – Oct 2014**
**Assistant lecturer**, Univ. of Granada, Granada.
Teaching at the Dept. of Signal Theory, Telematics and Communications (*Telematics* area):
- Degree in Telecommunication Technology Eng.:
  - Infrastructure and Communication Networks
  - Telematic Systems
- Telecommunications Eng.:
  - Computer Networks
- Co-advisor of several Degree Theses

## Education

**Oct 2010 – Oct 2014**  **Doctor of Philosophy**, *Univ. of Granada*, Granada, *Summa Cum Laude*.
Ph.D. Thesis
*Anomaly-based Multi-layer Intrusion Detection for MANET Environments. Advisors: D. Pedro García Teodoro and D. Gabriel Maciá Fernández. Summa Cum Laude*

**Oct 2009 – Sep 2010**  **1-year M.Sc. in Multimedia Technologies**, *Univ. of Granada*, Granada, *9.39/10*.
Master Thesis
*Study of the Performance of Multimedia Services Delivery in IP Mobile Environments. Advisor: D. Pedro García Teodoro. 9/10*

**Oct 2008 – Jun 2009**  **5-year B.Sc. in Electrical Eng.**, *Univ. of Granada*, Granada, *7.18/10*.
Last year and master thesis at the *Université Catholique de Lille, Institut Supérieur d'Electronique et du Numérique (Lille, France)*, through the Erasmus Program.
Master Thesis
*Chargeur de Batterie de Vélo Électrique. Advisor: D. Jean-Marc Capron. 9/10*

**Oct 2003 – Sep 2008**  **5-year B.Sc. in Telecommunication Eng.**, *Univ. of Granada*, Granada, *7.71/10*.
Master Thesis
*Automatic Signature Generation in h-NIDS using Stochastic Analysis and Selective Contents Labeling. Advisor: D. Pedro García Teodoro. 10/10*

## Competitive Grants

**Oct 2010 – Oct 2014**  **University Professor Training Program (FPU)**, Ministry of Education, Culture, and Sports.

**Sep 2008 – Jul 2009**  **Erasmus Grant**, Ministry of Education, Culture, and Sports / Government of Andalucía / Univ. of Granada.
Université Catholique de Lille, Institut Supérieur d'Electronique et du Numérique, Lille, France

**Jun 2007 – May 2008**  **Initiation to Research Grant**, Univ. of Granada.

## Languages

| | | |
|---|---|---|
| Spanish | **Native** | |
| English | **High** | *FCE/B2 with Grade A (C1 equivalent)* |
| French | **Intermediate** | *A2–B1* |

## Computer Skills

| | |
|---|---|
| Basic | HTML/CSS, Assembler, VHDL, AutoCad |
| Intermediate | JavaScript, Java, Bash, Test Driven Development (TDD), version control systems, Inkscape, Cisco equipment configuration (CCNA-1, CCNA-2), protocols and communication technologies (IEEE 802 family, IP, TCP, HTTP, FTP, DNS, SMTP, ...) |
| Advanced | Microsoft Office package (Word, Excel, PowerPoint), SQL, MATLAB, C, C++, C#, .NET, Python, LaTeX, SO's (UNIX, Windows), network simulators (NS-2, OMNeT++), wireless *ad hoc* networks, cryptographic and security techniques |

## Talks (selected)

Jun 2014    *Int. Conf. on AD-HOC Networks and Wireless (ADHOC-NOW)*, held in Benidorm, Spain

Sep 2012    *XII Reunión Española sobre Criptología y Seguridad de la Información (RECSI)*, held in San Sebastián, Spain

Jun 2012    *$11^{th}$ IEEE Int. Conf. on Trust, Security and Privacy in Computing and Communications (TrustCom)*, held in Liverpool, United Kingdom

## Publications (selected)

Jun. 2016    A. Ruiz-Heras, P. García-Teodoro and **L. Sánchez-Casado**. *ADroid: anomaly-based detection of malicious events in Android platforms*. Int. Journal of Information Security (Springer), DOI: 10.1007/s10207-016-0333-1

Oct. 2015    R.A. Rodríguez-Gómez, G. Maciá-Fernández, **L. Sánchez-Casado** and P. García-Teodoro. *Analysis and Modeling of Resources Shared in the BitTorrent Network*. Trans. on Emerging Telecommunications Technologies (Wiley), DOI: 10.1002/ett.2859

Aug. 2015    **L. Sánchez-Casado**, G. Maciá-Fernández, P. García-Teodoro and N. Aschenbruck. *Identification of Contamination Zones for Sinkhole Detection in MANETs*. Journal of Network and Computer Applications (Elsevier), DOI: 10.1016/j.jnca.2015.04.008

Jul. 2015    **L. Sánchez-Casado**, G. Maciá-Fernández and P. García-Teodoro. *A Model of Data Forwarding in MANETs for Lightweight Detection of Malicious Packet Dropping*. Computer Networks (Elsevier), DOI: 10.1016/j.comnet.2015.05.012

## Other Skills

Organization and management    Organizer of several Rubik's Cube competitions, highlighting the Spanish Championships 2012 and 2015, both held in the city of Granada.

Secretary of the Spanish Association of Rubik's Cube (AECR, *Asociación Española del Cubo de Rubik*).

Former National Delegate for the World Cube Association (WCA).

Social    Good team worker with good interpersonal skills (captain of an associated football team for years).

Adaptability to different multicultural environments (foreign stays, Erasmus grant, participation in international competitions).

Commitment, effort and dedication.

Driving license    B

## Interests

- Twisty puzzles (Rubik's style)
- Reading
- Team sports
- Cinema
- Photography