

# Curriculum Vitae

*Sergio Talens-Oliag*



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## Personal information

- **Name and Surnames:** Sergio Talens-Oliag
- **Place and Date of Birth:** Valencia, August, 12th, 1971
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## Academic Background

- *Graduate In Computer Science* by the *Universidad Politécnica de Valencia* (<http://www.upv.es/>).
- A.B.D. on the program named *Distributed and Parallel Computation* of the *Departamento de Sistemas Informáticos y Computación* (<http://www.dsic.upv.es/>) of the *Universidad Politécnica de Valencia*.
- Obtained the Advanced Studies Diploma (D.E.A.) on the PhD program called *Interdisciplinary Doctorate in Communication* of the *Departamento de Teoría de los Lenguajes* (<http://www.uv.es/teolen>) of the *Universitat de València* (<http://www.uv.es/>).

## Professional Experience

- *Senior DevOps Engineer* for *Kyso Operations Europe Limited*, January 2022 to present.

<https://kyso.io/>

Tasks:

- Help on building the self-hosted version of Kyso that is delivered to enterprise clients.
- Kyso application packaging for distribution (docker images, AWS marketplace images, etc.).
- Support enterprise clients during product release and update cycles.

- Write guides to setup Kyso on enterprise deployments.
- Build images following security best practices.
- CI/CD and Development Systems and Tools management and maintenance.
- *Consultant for Curelator Inc. on the Backend Development Team. August 2021 to January 2022.*

<https://n1-headache.com/>

Tasks:

- Implement new features and maintain the backend codebase.
- Participate in code reviews.
- Participate in testing and releases to production.
- Participate in the elaboration of new features and products.
- *IT Senior Operations Architect at Agile Content, S.A.. January 2020 to July 2021.*

<https://www.agilecontent.com/>

Tasks:

- Setup of the Continuous Integration and Deployment Infrastructures for the AgileTV platform using GitLab, Docker and Kubernetes.
- Development of tools to simplify the configuration and deployment of containerized applications using various orchestration tools (initially `docker-compose` and `kubernetes`).
- Configuration and deployment of services required by the platform and general use services (`nginx`, `haproxy`, `postgresql`, `prometheus`, `elk`, `mysecureshell`, ...).
- Original product platform supervision (*headend*, *origin*, DRM systems, *CDN* and service platform) and cooperation on the design and migration plan to a new platform.
- System Administration Teams supervision and collaboration for the rest of the company projects (mainly application deployments on AWS for production and on hosted servers for development and pre-production environments).
- *Director of the Information Systems Department (ISD) at the Instituto Tecnológico de Informática of the Universidad Politécnica de Valencia. January 2015 to January 2020.*

<https://www.iti.es/>

Tasks:

- Supervision and coordination of the Systems Administration Team, responsible for the setup and maintenance of the Information Systems of the Institute:
  - IaaS Platforms (OpenStack and Proxmox) and Container Orchestrators (Kubernetes).
  - Common use applications and services management (DNS, DHCP, LDAP, SMTP, IMAP, SAMBA / Active Directory, etc.).
  - Management of third party applications for common tasks (ERP, CRM, eLearning,

ticketing, file sharing) and development support (GitLab, Nexus, Testlink, SonarQube, Trac, Subversion, ...).

- In-house developed applications management (Web Identity Manager, Human Resources Applications, Internal Procedures Management, Issue Management Interface, Intranet static content and news management, Project Execution Manager, ...).
- Security related tasks (firewalls, backups, VPNs, etc.).
- Supervision and coordination of the *Applications Development and Integration Team*, working as project manager, analyst and/or developer in some of them:
  - Project Execution Management Application (Python/PostgreSQL Backend, VueJS frontend): in charge of the project in general and of the initial design and development of the backend and the integration with other services.
  - GitLab, Gitea and GitHub Hook processing system implemented in Golang (<https://salsa.debian.org/sto/json2file-go>).
  - Multi application LDAP user information synchronization tool (developed using python and ansible, integrated with the hooks system of the web frontend used to manage the LDAP data).
  - Web Identity Service (developed in Python, integrated with LDAP and a Database, provides tools to validate users using HTTP Basic Auth and JWT Tokens).
  - Static Intranet (design and setup of the Continuous deployment system using Jekyll and GitLab).
  - Intranet News Editor (Flask application design, users edit HTML using forms and the system uses git to push and publish using Jekyll and GitLab).
  - Simplified User Interface to the Issue Tracking system (Flask application without database, all the work is done using the CMDB REST API).
- Part-time lecturer at the *Departamento de Informática* of the *Universitat de València*. September 2018 to September 2019.

<https://www.uv.es/dptinf>

Subjects:

- Theory and practice of the *Security* course of the *Master en Tecnologías Web, Computación en la Nube y Aplicaciones Móviles*.
- Lab practices of the *Computer Security* course on the *Telematic Engineering* degree.
- Part-time lecturer at the *Departamento de Informática* of the *Universitat de València*. September 2016 to August 2017.

<https://www.uv.es/dptinf>

Subjects:

- Lab practices of *Computer Science II*.
- Lab practices of *Databases and Information Systems*.

- Lab practices of *Computer Fundamentals*.
- Lab practices of *Computer Networks Fundamentals*.
- Lab practices of *Multimedia Networks*.
- Director of the *Free Software, Systems And Security Area (FS<sup>3</sup>A)* at the *Instituto Tecnológico de Informática* of the *Universidad Politécnica de Valencia*. May 2010 to December 2014.

<https://www.iti.es/>

- Information Systems Manager at the *Instituto Tecnológico de Informática* of the *Universidad Politécnica de Valencia*. March 2006 to April 2010.

<https://www.iti.upv.es/>

- Part-time lecturer at the *Departamento de Informática* of the *Universitat de València*. January 2004 to September 2007.

<https://www.uv.es/dptinf>

Subjects:

- *Operating Systems* Lab practices (second year of Computer Science and Telematics Engineering).
- *Advanced Operating Systems* Lab practices (fourth year of Computer Science Engineering).
- Computer Science Analyst for *T-Systems S.A.*, working full time for the *LliureX* Project (<http://lliurex.net/>) in the *Conselleria de Cultura, Educació i Esport* (<http://www.cult.gva.es/>) of the *Generalitat Valenciana* (<http://www.gva.es/>). January 2004 to March 2006.

<http://www.t-systems.es/>

Tasks:

- Design, development and maintenance of distribution elements (packages, configuration artifacts, installation systems).
- Integration with the upstream project (Debian).
- Computer Security Consultant for *Tissat S.A.*, inside the *InfoCentre* project (<http://www.infocentre.gva.es/>) of the *Generalitat Valenciana*. December 2002 - December 2003.

<http://www.tissat.es/>

Tasks:

- Security Audits.
- Monitoring.
- Configuration and maintenance of security policies.
- Training.
- Part-time lecturer at the *Departamento de Sistemas Informáticos y Computación* of the

*Universidad Politécnica de Valencia*. September 2003 - November 2003.

<http://www.dsic.upv.es/>

- Senior Programmer for *Internet Business Constellation* (iBC). July 2002 - November 2002, working as analyst and programmer.

<http://www.inetbc.net/>

- Senior Programmer for *Intelligent Software Components* (iSOCO). June 2000 - July 2002, working as Programmer and System and Network Administrator.

<http://www.isoco.com/>

- Researcher at the *Instituto Tecnológico de Informática* of the *Universidad Politécnica de Valencia*. June 1999 - May 2000.

<http://www.iti.es/>

- Collaboration with the *Instituto Tecnológico de Informática* in an IMPIVA Project (<http://www.impiva.es/>). June 1998 - June 1999.
- Installation and Administration of TCP/IP Networks (Internet/Intranet) and Unix Servers (Linux) for:

- *Instituto Valenciano de Investigaciones Agrarias* (IVIA), 1995-99.

<http://www.ivia.es/>

- *Florida Centre de Formació*, 1996-98.

<http://www.florida-uni.es/>

- *Federación Valenciana de Municipios y Provincias* (FVMP), 1995.

<http://www.fvmp.es/>

- Other courses taught:
  - Three **Introduction to the use of Docker and Kubernetes** courses for UPV's administration and services staff. Unidad de Formación del PAS (UFASU), *Universidad Politécnica de Valencia*. 2019 - 2020.
  - A course about **DevOps with GitLab, Docker and Kubernetes** for technical staff of FERMAX. *Instituto Tecnológico de Informática*. 2019.
  - Two **Advanced Linux for Administrators** courses for technical staff of Consum Cooperativa. *Instituto Tecnológico de Informática*. 2016.
  - Two **Basic Linux for Administrators** courses for technical staff of Consum Cooperativa. *Instituto Tecnológico de Informática*. 2016.
  - One course about **Ubuntu Systems Administration in Active Directory Domains**. *Instituto Tecnológico de Informática*, 2014.
  - Four courses **Preparation of the LPIC-1 Certification Exams** (*Linux Professional Institute*

*Certification Level 1 Certification*). *Instituto Tecnológico de Informática*, 2010, 2011, 2015 and 2016.

- One course about **Technical protection of Software**. *Instituto Tecnológico de Informática*, 2008.
- One course about **Java Security**. *Instituto Tecnológico de Informática*, 1999.
- One course about **Design and Layout of Publications**. *La Nau dels Estudiants (Universitat de València)*, 1997.
- Four courses about **C++ Programming**. *Escuela Universitaria de Informática (Universidad Politécnica de Valencia)*, 1994-1996.
- One course about **Introduction to C++ programming for the Macintosh**. *Master de Artes Gráficas of the Universidad Politécnica de Valencia*, 1994.

## Publications, talks and participation in Congresses and Conferences

- *Short History of Linux and The Free Software Movement*. Lecture given the courses 2002/2003, 2003/2004 and 2010/2011 in the *Universidad Politécnica de Valencia* as invited lecturer inside the course about *Computer Science History* and also on April 2006 inside the *V Jornadas de Software Libre* at the *Casa de Cultura de Burjassot*.

<http://www.uv.es/sto/charlas/BHLSL/>

- Talk about *Free virtualization tools for GNU/Linux Systems* given at the **Congreso Internet del Mediterráneo** in Alicante, September 2010.

[http://www.uv.es/sto/charlas/2010\\_CIM/](http://www.uv.es/sto/charlas/2010_CIM/)

- Lecture about *Free Software Selection and Configuration for Server Networks* given at the **VIII Jornades de Programari Lliure** in Barcelona, July 2009.

[http://www.uv.es/sto/charlas/2009\\_07\\_VIII\\_JornadesPL/](http://www.uv.es/sto/charlas/2009_07_VIII_JornadesPL/)

- *Free virtualization tools for GNU/Linux Systems*. Article included on the 15th number of **Actualidad TIC** (ISSN: 1696-5876), July 2009.

[https://issuu.com/globalcomu/docs/revista\\_actualidad\\_tic](https://issuu.com/globalcomu/docs/revista_actualidad_tic)

- Lecture about *Free virtualization tools for GNU/Linux Systems* given at the **VII Jornades de Programari Lliure** in Barcelona, July 2008.

[http://www.uv.es/sto/charlas/2008\\_07\\_VII\\_JornadesPL/](http://www.uv.es/sto/charlas/2008_07_VII_JornadesPL/)

- Lecture about *Computer Science Projects Management with Free Software* given at the **III Jornadas de Software Libre de Albacete**, Albacete, April 2007.

<http://www.uv.es/sto/charlas/GPICSL/>

- *Agile Documentation Tools*. Article included on the 11th number of **Actualidad TIC** (ISSN: 1696-5876), November 2006.

[https://issuu.com/\\_iti\\_/docs/actualidad\\_n11](https://issuu.com/_iti_/docs/actualidad_n11)

- Lecture on *Agile Documentation Tools* given at the **V Jornades de Programari Lliure UPC**, July 2006.
- *Design and Implementation of the Custom Debian Distributions Toolkit (CDDT)*. Talk presented on the **II Open Source World Conference** celebrated in Málaga, February 2006.

<http://people.debian.org/~sto/Malaga2006/>

- Lecture on *Free software development from the IT Industry* given at the **IV Jornades de Programari Lliure UPC**, July 2005.

<http://www.uv.es/sto/charlas/Vilanova2005/>

- Lecture on *Building Custom Debian Distributions with the CDDtk* given at the **IV Jornades de Programari Lliure UPC**, July 2005.

<http://people.debian.org/~sto/Vilanova2005/>

- Lecture on the *LliureX Project on the Custom Debian Distributions Seminar* celebrated the 24th of September, 2004, inside the *Firenze World Vision 2004*.

<http://www.miu-ft.org/what/events/20040924.fwv.cdd/>

- Lecture on *Custom Debian Distributions* given at the **III Jornades de Programari Lliure** of the *Universitat Politècnica de Catalunya* (July 2004)

<http://www.uv.es/sto/charlas/Manresa2004/>

- *Security on the application development*. Lecture given at the *Escuela Politécnica Superior* of the *Universidad de Castilla la Mancha, Albacete*, course 2004/2005.

<http://www.uv.es/sto/charlas/SDA/>

- *Specialized GNU/Linux Distributions for the Public Administration*. Paper presented and included on the *proceedings* of the **International Conference on Open Source** celebrated in Málaga, February 2004.

<http://www.opensourceworldconference.com/2004/>

- Author of three articles published on the *Boletín Electrónico de Infocentre* during 2003.

<http://www.uv.es/sto/articulos/>

- Author of the book *INTERNET. Redes de Computadores y Sistemas de Información*, Edited by **ITP-Paraninfo**, 1997.

<http://www.ivia.es/~sto/alice/>

# Participation in Projects

- **ViSCa**. Leader of ITI contributions to the ViSCa (*Virtualization of Smart Cards*) project of the ITEA program. 2013-2016.

<https://itea3.org/project/visca.html>

<http://www.eureka-visca.org/>

- **CSIRTCV**. Puesta en marcha del *Centro de Respuesta ante Incidencias de Seguridad Informática de la Comunidad Valenciana* dependiente de la *Consellería de Justicia y Administraciones Públicas* de la *Generalitat Valenciana*, 2006-2009.
- **Design of the gvSIG projects colaborative infrastructure**. Design and deployment of the colaborative work enviroment for the **gvSIG** of the *Consellería de Infraestructura y Transporte, Generalitat Valenciana*, 2006-2009.
- **LliureX**. Development on the initial versions of a GNU/Linux distribution for the *Conselleria de Cultura, Educación y Deporte, Generalitat Valenciana*, 2004-2006.
- **MEDIM** (*Minería de Datos Estructurados basada en Distancias y Métricas, Structured Data Mining based on Metrics and Distances*). R&D project funded by the *Generalitat Valenciana*, 2004-2005.
- **Autoría y Contenidos en la Red** (*Authorship and Contents in the Net*). R&D project funded by the *Generalitat Valenciana*, 2004-2005.

## Other activities

- Developer of the **Debian** Project.

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

- Design and layout of the series *Documentos de Trabajo (Eutopías)*, *Centro de Semiótica y Teoría del espectáculo*, *Universitat de València & Asociación Vasca de Semiótica*, 1988-1998.

<http://www.uv.es/eutopias/>

- Design of the HTML pages of the **Ediciones Cátedra** web server, 1997.

<http://www.catedra.com/>

## Languages

- **English**: high level, written and spoken.
- **Catalan/Valencian**: high level, written and spoken.



# Computer Science Related Knowledge

- Operating Systems: UNIX, Windows and MacOS, at user, administrator and programmer level.
- Programming Languages: Python, UNIX Shell, C, Rust, Golang, C++, Java, JavaScript / ECMAScript (nodejs).
- Experience in integration, installation, configuration and maintenance of all kind of services, basically running under UNIX like systems and using free software:
  - Backup Systems (borgbackup, restic, rdiff-backup, backupninja, etc.),
  - Configuration Management Systems (saltstack, ansible, etc.),
  - Content Management Systems (joomla, drupal, plone, etc.),
  - Databases (postgresql, mysql, etc.),
  - Directory Services (openldap, pam\_ldap, nss\_ldap, etc.),
  - Domain Name Services (bind, powerdns, dnsmasq, etc.),
  - E-Mail Services (postfix, dovecot, mailman, etc.),
  - IaaS Platforms (openstack, proxmox, etc.) and Container Orquestation Tools (kubernetes),
  - Monitoring Tools (monit, icinga, zabbix, etc.),
  - Network Filesystems (CEPH, nfs, samba, gfs, etc.),
  - Project Management Tools (gitlab, gitea, trac, redmine, gforge, etc.),
  - Static Website Generators (jekyll, ikiwiki, hugo, etc.),
  - Version Control Tools (git, subversion, mercurial, etc.),
  - Virtualization Tools (kvm, lxc, docker, virtualbox, openvz, etc.),
  - Web Servers (nginx, apache, lighttpd, etc.).
- Unix/Linux Security Tools:
  - Firewalls (ipchains, iptables, nftables, pf),
  - Intrusion Detection Systems (snort, integrity, logcheck),
  - Network Monitoring Tools (ntop, ipaudit),
  - Security Scanners (nessus, openvas).
- High Availability and Fault Tolerance Systems:
  - Linux-HA (hearbeat, mon, drbd, ...),
  - Load Balancing (lvs),
  - RedHat cluster suite (cman, rgmanager, clvm, ...).