

# Tono Riesco

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## Experience

### **Engineer in Controls, Automation, Network and Supervision in Access Control and Safety Systems (CERN, Switzerland)**

#### **2013-Present**

- Provide technical expertise and support to the sections (AC and SSE) in the field of Controls, Automation and Network. In the domains of the deployment, upgrade and maintenance of all the Access & Safety systems under the responsibility of the ASE group.
- Expand and consolidate the Zabbix monitoring tool, merging with the SSM.
- Study for transforming ZABBIX into an "exportable" service to other groups, and an additional module to TIM.
- Provide an "internal detailed monitoring" capabilities for the GS/ASE/AC section
- Participate actively in the configuration of the WinCC & other SCADA systems for the new PS system
- Drive the evolution of the WinCC/PCS7 SCADA evolution for the LASS (LHC)
- Participate and advise the ZORA SPS team in the evolution to WinCC heavy client, and assist in the diagnosis of the performance issues.
- Study control architecture evolution possibilities
- Provide expertise in the IT network monitoring and diagnostic for all access & video systems

### **Responsible O&M for the LHC Access Control and Safety Systems (CERN, Switzerland)**

#### **2008-2012**

- Planning of maintenance periods with personal and budget control with extensive management of CAMM software. Maintenance plans for staff and contractors.
- Procedures for operation with permanent links to AB/OP, Shutdown Coordination Team. RP and others.
- Tracing and documentation for the LASS modifications and support for INB documentation and reports. Documentation related to the maintenance and user support: FAQ, How-to, Stock control, etc.
- Supervision of a team in the day-by-day operation matters and projects for improvement of the system.
- Paper ICALEPS 2011. Access Safety Systems – New Concepts from the LHC Experience.

### **Section Leader of the Control's Section (CERN, Switzerland)**

#### **2005-2008**

- TIM, TCR, CSAM and SNIFFER projects and O&M.
- Support for Access Safety System Section.
- Project management and logistics: organization, planning and installation follow-up of different facilities related with the control system.
- Provide detailed technical specifications of different installations based in the user requirements completed with resource plans for manpower and investment.
- Contract specification and to supervise its execution.

- Paper ICALEPS 2007: Technical Infrastructure Monitoring at CERN. Edinburgh.

## **Engineer for Safety and Control Systems for Accelerators (CERN, Switzerland)**

### **1998-2005**

- Deputy Section Leader in charge of the Control/Safety systems for the access of accelerators and experimental areas. Responsible of the Industrial Control Training project.
- Academic Training Program. Real Time Process. July 2004.
- Leadership in activities related in industrial support for the safety systems with representation of the Access Section in different CERN groups.
- Project leader for the renovation of the SPS access safety systems. Renovation of SPS Access Safety System with a complete SCADA system for the SPS control room based in Linux, TCL/Tk, Mysql, Apache and PHP technologies. Change all the old access system for new architectures based in data acquisition and control system design with integration of PLC's Siemens S5 (95, 115U) and ready for the new S7 PLC's (S7300, S7400 F and H). ACIS Project.
- Member of the LHC project for the safety and access systems.
- Supervision and follow up of industrial contracts (e.g. C168).
- Access control for the experimental Area Proton Synchrotron-Anti proton Decelerator PS-AD.
- Maintenance of Access Safety Systems.
- First prototype for the LHC Access and Safety System.

## **Support Software and Hardware Engineer. (University Rovira i Virgili, Spain)**

### **1994-1998**

- Inside the IT department of the University, to supply IT support to academic personnel and technical support departments. Configuration of computers, compatible microcomputers and peripherals, providing technical support to final users.
- Hardware and software development for i8051-family based controllers.
- Web pages design. Support of the official web site of the Department.
- Installation and configuration of systems HP, LINUX, PC and APPLE.
- Maintenance of networks (Cables, cards, hubs, bridges, printers, etc.)
- Installation and maintenance of electronic material and support computer programs (Office, Microstation, Hisys, Autocad, Netscape, Eudora etc.)
- First HTML training in Tarragona.
- Project PCSAI (for my thesis). Automatic stop of UNIX servers in case of a drop in voltage.

## **Works Coordinator. SIREMA S.A. (Many cities, Spain)**

### **1986-1994**

- Inside many nuclear reactor power stations (Cofrentes, Valdecaballeros, Asco I and II, Vandellos I and II, Zorita): Coordination responsibility of people in revisions and maintenance works.
- Supervise manufacturing, assembling, setting and trial running of programs of general maintenance, cranes, elevators and electrical motors inside the nuclear power stations.
- Revision and maintenance of switches of 6.3,6.9 and 20 kV. Revision of Motors Central Controls, setting and trial running of motorized valves (Rotork, Limitorque, Siemens etc.)

- Manufacturing and technical supervision in 400 kV substations with extensive writing of test procedures, purchasing specifications and customer correspondence in many projects.

## Education

### Industrial Engineer (Electronics)

#### 1991-1996

- University Rovira and Virgili (4 years) and Universitat de Barcelona (2 years) Overall GPA: 7.2 over 10. 10 over 10 in the final thesis.
- Subjects: Electronics, Electricity, Automatics and Robotics.

## Courses

- Management: Goal Directed Project Management, Introduction to Management, Techniques de communication, Core Development Package for Section Leaders, Gestion opérationnelle des projects I and II.
- Technical: Profibus, PcView, LabVIEW, Software Engineering- ESA, Habilitation Electrique, Linux System Administration.
- Languages: Anglais general: I, II, III and IV, Anglais Spécifique I and II, Writing technical reports.

## Languages

- Spanish. Mother tongue.
- Fluent in English. Many courses and official language at work since 1998.
- Fluent in French. Many courses and official language at work since 1998.
- Fluent in Catalan.
- Understanding Italian.

## Skills

- Network Administration.
- SCADA and data acquisition.
- Industrial Control and PLC's.
- Linux Administration.
- Operation and Maintenance Systems.