Giuseppe Antonio Pierro

Personal information	Date and place of birth: 05/04/1977, Terlizzi (BA), Italy Home Address: Via F. Lana, 30 – 09030, Elmas (CA), Italy Telephone number: +39 340 830 1782 (Italy); +33 (0)761627970 (France); +41 (0)762655508 (Switzerland) E-mail: antonio.pierro@gmail.com Github: antonioJs; Twitter: @antonio_pierro_; Stackoverflow: AntoJs

Education

2008-2010	**PhD in Physics (computer-science oriented)** The European Organization for Nuclear Research (CERN) and Università degli Studi di Bari Development of tools for handling and monitoring the data for the CMS experiment at the CERN
2003-2005	**Computer science certification for secondary school teachers** (Scuola Regionale Interateneo di Specializzazione per la formazione degli insegnanti della scuola secondaria. Classe di abilitazione: 42/A) SSIS Puglia - Università degli Studi di Bari.
1996-2001	**Degree in Physics** (110/110 cum laude) Università degli Studi di Bari. **Interactive solution of classical physics problems using a web application** Sistema per la risoluzione interattiva dei problem di meccanica
Languages	**Italian**: mother tongue: **English**: fluent. **French**: fluent.
Technical skills and competences	I have been involved in open source communities, mailing lists and projects, as a release tester, reporting and fixing bugs (https://github.com/antonioJs; http://stackoverflow.com/users/647670/antojs) **Programming/Scritpting/Markup language**: good knowledge of C, C++, Java, python, Matlab, PHP. Very good knowledge of JavaScript, CSS, HTML. **JavaScript**: able to write stand alone JavaScript libraries, very good knowledge of MVC (backbonejs), jQuery, underscorejs, YUI, requirejs, modernizr, behavior-driven development framework to test JavaScript codes. **Web Designer:** familiar with bootstrap, initializr, LESS, responsive CSS, Media Queries, Progressive Enhancement, SMACSS, OOCSS. **Other competences**: familiar with agile development practices, good knowledge of the development life-cycle. Strong analytical & debugging skills. Familiar with the principles of object-oriented design. Strong UI development experience. Since 2003, I have acquired experience in designing and testing the security of web applications and web services. Since 2001, I have designed and developed websites and applications in PHP as well as in Python. I have some abilities in graphic designing thanks to nine years of visual design experience for the web. Ability to seek constructive criticism, brainstorm and produce new ideas from unexpected sources.
Organisational skills	I have developed strong organizational skills and the ability to lead a working team in a variety of tasks and projects. During my work at CERN, I supervised several Erasmus students coming from the Department of Computer Science, Vilnius University (Lithuania). The students successfully accomplished the assigned tasks and we wrote reports as well as some papers included in International Conferences Proceedings.
Objectives	Seeking a challenging and exciting position where I can combine my skills in web-based development with my interest in open access and open source movement in the digital library world. I am willing to travel and present the results of my work at conferences to improve my competences and increase my knowledge.

Work Experience

2012 | **R&D Engineer**

Incenteev, 68 bis rue Raymond Losserand - 75014 **Paris. France**

Web developer for a start-up company. I was in charge of developing the front-end part of a web application, which helps companies to organize their business challenges among employees in a simple and effective way.
I developed it by using requirejs, backbone.js, bootstrap, LESS CSS, Symfony2.
https://www.incenteev.com/en/

2011-2012 | **R&D Engineer**

DSM Apps 203 rue de Charenton 75012 **Paris**. **France**.

Web developer for a start-up company. I was in charge of developing the front-end part of an E-learning platform.
I developed several widgets using the MVC pattern.
https://360learning.com/fr/

2008-2011 | **Software developer**

CERN Route de Meyrin CH-1211 **Genève**. **Switzerland**

I was a member of the CMS Database core project. I was responsible for providing web services, taking part at the compilation of the requirements, as well as at the design and the development of different tools and services.
https://cms-conddb.cern.ch/easymon/ https://cms-conddb.cern.ch/gtList/ https://cms-conddb.cern.ch/popcon

2006-2007 | **Software developer**

INFN Sezione di Bari, Via E. Orabona n. 4, 70126 Bari, **Italy**

I was in charge to develop and conduct experiments in High Energy Physics (HEP) and Grid Computing. As to my activity in HEP, I worked in the "Compact Muon Solenoid" experiment. As to my activity in Grid Computing, I contributed to the development of a tool to monitor the resources of grid computing "GridICE". This tool was used to monitor the resources and the applications in the grid environment and to help detecting faulty situations, contract violations and user-defined events.

2005 | **Information Technology Teacher**

En.A.I.P. Puglia - Via Dei Bersaglieri 19/B, 70126 Bari, **Italy**

I taught Web Design and Web Program Languages, instructing students in both basic and advanced Web development principles, practices, and languages such as Cascading Style Sheets, PHP, JavaScript, and Macromedia/Adobe suite.

2003-2005 | **Software developer**

INFN Sezione di Bari, Via E. Orabona n. 4, Bari, **Italy**

I had the task to maintain and monitor the "Bari Tier-2 Computing Center" performance in order to support the overall needs of Physics Experiments. I participated to the software analyses by developing and using some software tools to analyse millions of real and simulated event data.
I developed and studied a Simulation Model of Grid environment, using a software system called Ptolemy II (a set of Java packages supporting heterogeneous modelling, simulation, and design of concurrent systems).

2002 | **Software Web Developer**

INFN, via E. Fermi, 44, Frascati Roma, **Italy**

Designing, developing and maintenance of a web application to promote the cooperation between the INFN and the Investment Funds released by the European Union.

2001 | **Software Web Developer**

SYSMAN - Via G.Lorenzoni, 19 - 00143 Roma, **Italy**

I designed and developed the web site of the "Servizio Meteorologico dell'Aeronautica Militare Italiana".
www.meteoam.it/

Teaching activities

2012-2013	**Teaching assistant in Computer Science**
	Università degli Studi di Cagliari, Faculty of Engeneering and Architecture, Via Marengo, 3 – 09123 Cagliari, Italy
2012-2013	**Teaching assistant in General Physics**
	Università degli Studi di Cagliari, Faculty of Science – 09042 Monserrato (CA), Italy
2012-2013	**Teaching assistant in Applied Physics**
	Università degli Studi di Cagliari, Faculty of Medicine and Surgery – 09042 Monserrato (CA), Italy
2007-2008	**Professor at the "Biomed Grid School" for the "Enabling Grids for E-sciencE" (EGEE) project**
	EGEE, Villa Monastero, Via Polvani, 4 - 23829 Varenna (LC), Italy
2002-2005	**High school teacher in Mathematics, Physics and Computer Science**
	Istituto Prof. Stat. per l'Industria e l'Artigianato - ITIS E. Majorana, Via Nazionale, 9, 70128 Bari, Italy

Training

May 2010	**Oracle Applications 11i: Install, Patch, and Maintain**
	INFN-CNAF, via Ranzani, Bologna
April 2010	**Oracle Applications 11i System Administrator Fundamentals: Manage application security and system resources**
	INFN-CNAF, via Ranzani, Bologna
June 2009	**CERN openlab Multi-threading and Parallelism Workshop**
	CERN, Route de Meyrin 385, 1217 Meyrin, Suisse
Dec. 2009	**Developing secure software**
	CERN, Route de Meyrin 385, 1217 Meyrin, Suisse
Oct. 2008	**Scuola Nazionale di Fisica Nucleare e Subnucleare**
	INFN Sezione di Bari, Via E. Orabona n. 4, 70125 Bari, Italy
Aug. 2008	**CERN School of Computing Diploma**
	CERN School of Computing - Gjovik - Norway
	Computer Security, Architecture and Performance Tuning, Creating secure software, Networking, QoS and Performance.
Feb. 2005	**School for Grid Site Administrator**
	Via Enrico Fermi, 40, 00044 Frascati Roma, Italy
	Grid security, Site configuration and management, Services configuration and management.
Mar. 2003	**Tutorial IPv6**
	Università degli Studi di Bari. Piazza Umberto I, 1, 70121 Bari
Oct. 2002	**Programmazione ad oggetti in Java e C++** (Object Oriented Programming in Java and C++)
	INFN Sezione di Bari, Via E. Orabona n. 4, 70125 Bari, Italy
Oct. 2001	**HTML and JAVA language and their use for the creation of Physics experiments (simulations).** Linguaggio HTML, linguaggio JAVA e loro uso per la creazione di simulazione di esperimenti di fisica.
	INFN Sezione di Bari, Via E. Orabona n. 4, 70125 Bari, Italy

List of publications

I published several papers, ten of which are talks presented at International Conferences and collected in the Proceedings:

- Giuseppe Antonio Pierro et al., "jSPyDB, an open source database-independent tool for data management", in "Journal of Physics Conference Series", 331 042020, 2011, pp. 1-7. **Presented at** CHEP2010: International Conference on Computing in High Energy and Nuclear Physics, 18-22 Oct. 2010, Taipei (Taiwan).
- Giuseppe Antonio Pierro et al., "Fast access to the CMS detector condition data employing HTML5 technologies", in "Journal of Physics Conference Series", 331 042019, 2011, pp. 1-7. **Presented at** CHEP2010: International Conference on Computing in High Energy and Nuclear Physics 2010, 18-22 Oct. 2010, Taipei (Taiwan).
- Giuseppe Antonio Pierro (with Francesca Cavallari et al.) "Time-critical Database Condition Data Handling in the CMS Experiment During the First Data Taking Period", in "J. Phys.: Conf. Ser", 331 042007, 2011.
- Giuseppe Antonio Pierro (with Michele De Gruttola et al.), "Time-Critical Database Conditions Data-Handling for the CMS Experiment", in "Nuclear Science. IEEE Transactions on", 58: 4, pp. 1460-1464, Aug. 2011.
- Giuseppe Antonio Pierro et al., "CMS conditions database web application service", in "Journal of Physics Conference Series", 219 072048, 2010, pp. 1-10. **Presented at** Computing in High Energy Physics Conference, Prague, March 2009.
- Giuseppe Antonio Pierro (with Michele De Gruttola et al.), "First experience in operating the population of the condition database of the CMS experiment", in "J. Phys. Conf. Ser", 219: 042046", 2010.
- Giuseppe Antonio Pierro et al., "PopCon monitoring: web application monitoring for detailed real-time database transaction monitoring", in "DMS 2009 Proceedings", AIP Conf. Proc. 1504, vol. 1, pp. 966-970. **Presented at** the 15th International Conference on Distributed Multimedia Systems, San Francisco Bay, September 2009.
- Giuseppe Antonio Pierro et al., "Probing methods for automatic error resolution in a heterogeneous software environment", in "AIP Conference Proceedings", 1504, 2012, pp. 999-1002. **Presented at** ICCMSE 2009: Symposium on Computing in Experimental High Energy Physics, Rhodes, October 2009.
- Giuseppe Antonio Pierro et al., "Development of Web Tools for the automatic Upload of Calibration Data into the CMS Condition Data", in Claude Leroy, Pier Giorgio Rancoita (eds.), Astroparticle, Particle And Space Physics, Detectors And Medical Physics Applications, Volume 5, World Scientific Publishing, London,16: 7, 2010, pp. 724-728. Presentato a 11th ICATPP. Villa Olmo, Como 5-9 October 2009.
- Giuseppe Antonio Pierro (with Michele De Gruttola et al.), "Persistent storage of non event data in the CMS databases", in "Journal of Instrumentation", Volume 5, Issue 04, pp. 4003, 2010.
- Giuseppe Antonio Pierro (with Cristina Aiftimiei et al.), "GridICE: monitoring the user/application activities on the grid", in "Journal of Physics Conference Series", 119, 2008, pp. 1-7.
- Giuseppe Antonio Pierro et al., "Design Principles of a Web Interface for Monitoring Tools", in "Journal of Physics Conference Series", 119 062005, 2008, pp. 1-9.
- Giuseppe Antonio Pierro (with Julia Andreeva et al.), "Use of grid tools to support CMS distributed analysis", in "Nuclear Science Symposium Conference Record, 2004 IEEE", Volume: 4, pp. 2029-2032. **Presented at** Nuclear Science Symposium, Medical Imaging Conference: 16-22 October 2004, Rome, Italy.
- Giuseppe Antonio Pierro et al., "Combined Analysis of GRIDICE and BOSS Information Recorded During CMS-LCG0 Production", in "CMS Note", CERN-CMSNOTE-2004-028, 2004, pp. 1-12.
- Giuseppe Antonio Pierro (with Tim Barrass et al.), "The CMS analysis chain in a distributed environment", in: "Nucl. Instrum. Methods Phys. Res.", A 559, 1, 2006, pp. 38-42.
- Giuseppe Antonio Pierro (with Julia Andreeva et al.), "Distributed Computing Grid Experiences in CMS", in "IEEE Transactions on Nuclear Science", 52: 4, 2005, pp. 884-890.

For my further scientific publications please refer to the Online Database from the High Energy Physics information system:
http://inspirehep.net/search?ln=en&p=giuseppe+antonio+pierro&of=hb&action_search=Search