CURRICULUM VITAE

Personal Information	
Surname	**SIDIROPOULOS**
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Professional Experience	
12/2017-today	***Development Engineer*** Spacelabs Healthcare, Edinburgh, United Kingdom Developing an "Ambulatory ECG recorder patch" used in the diagnosis of heart arrythmias. Among others my duties are involving the following: - Feasibility Studies - Board level design using Altium Designer - Firmware development in C for microcontrollers using Keil IDE - System integration and test automation using Python - Parts Commissioning - Debugging - PCB rework
12/2016- 11/2017	***Research Associate in Electrical Drives*** University of Edinburgh, School of Engineering, Institute for Energy Systems, Edinburgh, United Kingdom Duties: - Implementation of MATLAB and Simulink Algorithms on Real Time HW for improving the efficiency of Wind Turbines while minimizing losses. - Teaching the "Data Acquisition and Handling Course" in the School of Physics and Astronomy
7/2012- 11/2016	***Senior Electronics Engineer*** University of Edinburgh, School of Physics and Astronomy, Particle Physics Experiment Group Edinburgh, United Kingdom Duties: - I was involved in several aspects of the upgrades efforts for the ATLAS and LHCb experiments at CERN.

	- I significantly contributed in the development and teaching of the Data Acquisition and Handling Course which is built around Python programming and the Raspberry Pi mini Linux Computer.
10/2009- 11/2011	***R&D Associate*** RigasLabs S.A. Thessaloniki, Greece Duties: I was in charge of the electronics design of the "EOLOS" Post Column Derivatization system which is used in HPLC analysis. Among others my duties were involving the following: - System/board level design using special CAD SW - Firmware development for microcontrollers using special IDE SW - System integration - Parts Commissioning - Debugging - PCB rework
1/2007-3/2009	***Academic Visitor / Project associate*** Imperial College London / CERN, High Energy Physics Group, London, United Kingdom / Geneva, Switzerland Duties: I was responsible for the (FPGA) firmware development as well as testing and commissioning of the Wheel Card (Jet trigger) which is part of the CMS Global Calorimeter Trigger system. The project has successfully finished and the Wheel Card is installed, fully tested and is working along with LHC and CMS.
1/2003-12/2006	***"Heraclitus" Fellowship*** University of Ioannina Research Committee & UOI High Energy Physics laboratory, Ioannina, Greece Duties: i. Design and tests of the data reduction FirmWare using VHDL for the off-detector electronics of the CMS Preshower sub detector which part of the LHC at CERN. ii. Design and manufacture of a stand-alone trigger emulator for particle and nuclear physics experiments, based on true random number generation.
3/2004-12/2006	***Electronics Engineer for the European "I-Imas" project*** University of Ioannina Research committee & UOI High Energy Physics laboratory, Ioannina, Greece Duties: participation in the "I-Imas" European research project as an Electronic Engineer for both software and hardware tasks in the responsibility of the UOI HEP LAB group.
9/2003-6/2005	***Teaching Assistant*** University of Ioannina Research Committee,

	Ioannina, Greece Duties: responsible for teaching the ANSI C programming language to 1st year undergraduate students.
9/2003-2/2005	***Scientific Associate / Laboratory Instructor*** Technological Education Institute of EPIRUS, department of Tele-Informatics and Management, Arta, Greece Duties: responsible for teaching Telematic Applications to 3rd year undergraduate students.
6/2003-5/2004	***Education Consultant for Small enterprises under the "Go Online" framework*** University of Ioannina Research Committee Ioannina, Greece Duties: responsible for teaching the staff of small enterprises the advantages of using the internet in order to promote the company's prestige and automate their daily workload.
9/2001-8/2003	***Hardware and Network engineer*** "Cosmodata" LTD informatics solutions Ioannina, Greece Duties: responsible for setting up and maintaining Personal Computers and small Local Area Networks. Provide Hardware support to customers on their premises.

Education	
11/2002-2/2009	***PhD in Modern Electronic Technologies*** University of Ioannina Dept. of physics, HEP LAB Ioannina, Greece *PhD thesis topic: Calculation and removal of pedestal/common mode and trigger emulation for particle physics experiments.*
10/2000-10/2002	***MSc in Modern Electronic Technologies*** University of Ioannina Dept. of physics, HEP LAB Ioannina, Greece *Modules: Analogue Electronics, Digital Design, VHDL Design, VLSI Design, Board Level Design, Telecommunications, Computer Network, Noise in Electronic Circuits, Medical Physics Instrumentation, Experimental Physics Instrumentation, Experimental Chemistry Instrumentation* *MSc thesis subject: PCI I^2C Add-in card for controlling HEP Front-End ICs.*

9/1996-9/2000	***BEng in Electronics Engineering*** Technological Education Institute of Thessaloniki Department of electronics, Thessaloniki, Greece *BEng thesis subject: Smart Uninterruptible Power Supply.*
9/1991-7/1994	Polyvalent High School of Thessaloniki Thessaloniki, Greece

Languages	
	• Greek (mother tongue) • English (fluent) (Certificate of Proficiency in English) • French (beginner's level)

Additional Qualifications and Skills.	
	• Microcontrollers including CortexM, AVR32, Arduino, Raspberry Pi and ESP8266/ESP32 • Major VHDL developing tools (Xilinx ISE, Altera Quartus, Mentor Graphics FPGA Advantage & ModelSIM). • Programming languages (VHDL, C, Python) • Programming with LabVIEW, Matlab & Simulink. • Computer Aided Design tools (Altium Designer, Orcad, CorelDraw). • Version Control using TFS, SVN, SUBVERSION • Experience in designing Flex or Rigid/Flex multilayered PCBs. • Experience of manufacturing 2 layer In-House PCBs. • Experience of using Surface Mount Components and performing SMT Rework. • Microsoft Windows & Office. • Ubuntu Linux. • Experience with various interfaces like: Optical Fibers, PCI, USB, VME, microTCA, I2C,SPI, RS-232, MIDI, 1-wire, Ethernet, WiFi, Bluetooth and ZigBee.

Interests & Hobbies
Playing percussion instruments, reading modern literature, Cycling, Table tennis.

Personal Goal

I believe in the creation of the necessary conditions that will enable technology to serve the needs and goals of our society. With clear and well scheduled objectives I will support every effort in this direction.

Selected Publications

"A VME-Based Readout System for the CMS Preshower Sub Detector"

G.Antchev, D.Barney, W.Bialas, J.C.Da Sivla, P. Kokkas, N.Manthos, S.Reynaud, **G.Sidiropoulos**, W.Snoeys, P.Vichoudis
Published in IEEE Trans. Nucl. Sci. 54 623.

"First Results of the Performance of the CMS Global Calorimeter Trigger"

C.Foudas, G.Iles, J.Jones, A.Rose, M.Stettler, **G.Sidiropoulos**, A.Tapper, J.Brooke, R.Frazier, G.Heath
TWEPP-07 Topical Workshop on Electronics for Particle Physics

"A Programmable Trigger Emulator Based on True Random Bits"

N.Manthos, **G.Sidiropoulos**, P.Vichoudis
IEEE Nuclear Science Symposium Conference Record, 2006 Vol.1, 29 Oct 2006 - 1 Nov 2006, 510.

"Implementation of on-line data reduction algorithms in the CMS Endcap Preshower Data Concentrator Card"

D.Barney, W.Bialas, P.Kokkas, N.Manthos, S.Reynaud, **G.Sidiropoulos**, P.Vichoudis
Published in JINST 2 P03001 journal of Instrumentation, 2007 IOP/SISSA

"PACE3: a Large Dynamic Range Analog Memory Front-End ASIC Assembly for the Charge Readout of Silicon Sensors".

P. Aspell, D.Barney, W.Bialas, P.Bloch, M.Dupanloup, A.Go, K.Kloukinas, N.Manthos, D.Moraes, Q.Morrissey, A.Peisert,, S.Reynaud, **G.Sidiropoulos**, A.Tcheremoukhin, P.Vichoudis
IEEE Nuclear Science Symposium Conference Record, 2005 Vol.2, 23-29 Oct. 2005, 904.

"Production Testing and Quality Assurance of the CMS Preshower Front-end Chips - PACE3".

P.Aspell, D.Barney, Y.Beaumont, W.Bialas, I.Evangelou, A.Go, P.Kokkas, N.Manthos, I.Papadopoulos, A.Peisert, S.Reynaud, **G.Sidiropoulos**, A.Tcheremoukhin, F.Triantis, P.Vichoudis
Proceedings of the 11th Workshop on electronics for LHC and future experiments, Valencia (2005), CERN-LHCC-2005-038 (2005), 182.

"An efficient hardware design for rejecting common mode in a group of adjacent channels of silicon microstrip sensors used in high energy physics experiments".

N. Manthos, **G.Sidiropoulos**, P.Vichoudis
Real Time Conference, 2005. 14th IEEE-NPSS
June 4-10, 2005 Page(s):436 – 440
Published in IEEE Trans. Nucl. Sci. 53 1045.

"Results of the First Performance Tests of the CMS Electromagnetic Calorimeter".

The CMS Electromagnetic Calorimeter Group
Published in Eur. Phys. J. C 44, s02, 1–10 (2006).

"A flexible stand-alone testbench for facilitating system tests of the CMS Preshower".

P.Vichoudis, S.Reynaud, D.Barney, W.Bialas, A.Go, **G.Sidiropoulos**, Y.Beaumont, J.Domeniconi
10th Workshop on Electronics for LHC and future Experiments, September 13-17, 2004

References

Organization	University of Edinburgh
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