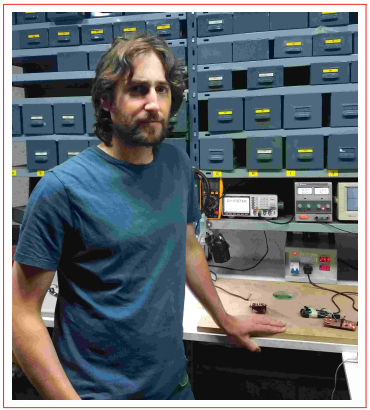
Pablo Slavkin

Resume

Piedras 689, Bariloche
Río Negro, Argentina
(+54)(911) 6 243 3463
(+54)(2944) 459 671
13/12/1976
pslavkin@diseniioconingenio.com.ar
Online Resume



"In the tools, as in the instruments, what matters is the artist"

Presentation

I am an electronic engineer from School of Engineering and Technology ITBA, recently graduate as Specialist in Embedded Systems and studying a Master in Embedded Systems from University of Buenos Aires, UBA.
I developed my career working in product development area of several national companies and in research in state institutions.
I was in charge of an electronic engineering studio offering electronic design and production services and I am currently working as a freelance electronic developer.
I work daily designing embedded electronic equipment executing tasks such as:

- Taking requirements and planning acceptance tests of hard and soft.
- Schematic design, PCB, simulations, assembly, 3D modeling and machining.
- Coding for real time in C / C ++ in bare metal or over RTOS.
- Codification and execution of the unit tests and management of continuous integration tools.
- Assembly and start-up of prototypes and assembly line documentation.

I am very pragmatic, committed and enjoy solving complex problems in a creative way by exchanging ideas with my peers I prefer down-top developments using Agile concepts to keep the product functional from the beginning.
I have an electronics workshop with tools such as:

- Assembly line of SMD and TH plates, pasta stencil, pick and place, reflow oven and wave soldering machine.
- Reworking and manual welding tools.
- Stock of SMD and TH materials of current and specific use.
- CNC machining center.
- Machine for cutting and laser engraving.
- Several machines for 3D printing.
- Generators, Oscilloscopes and Advanced Instrumentation for measurement and diagnosis.
- Electronic tools for firmware development.

These tools, my experience, technical ability and frequent academic updating allow me to unwrap in most instances of the development of a professional embedded electronic equipment.

Education

2018–2018 **Specialization in Embedded Systems** , *FIUBA - University of Engineering of Buenos Aires* , Buenos Aires , *Average 9.33* .
See program

2007–2016 **Doctorate in Engineering** , *UTN - National Technological University FRBA* , Buenos Aires , *Average 10 on 3 approved subjects + 3 late due* .
Mention Digital processing of images and signals. Suspended by moving to another city. See program

1996–2005 **Electronic Engineering** , *ITBA - Technological Institute of Buenos Aires* , Buenos Aires , *Average 6.5* .
See program

1990–1995 **Electro Mechanical Technician** , *ENET Nº1 Brigadier General Pascual Echagüe* , Concordia, Entre Ríos , *Average 8.5* .

1982–1989 **Primary School** , *Velez Sarsfield School* , Concordia, Entre Ríos , *Average 8.5* .

Experience

Professional

2019–Present **Freelance Electronic Engineer** , , , .
Personal entrepreneurship Electronic design services, hardware, firmware and electronic equipment.

2011–Presente **Development and production of electronic equipment**, *Grupo Noto* , , .
I develop and manufacture a whole line of aesthetic electromedicine electronics equipment, hardware, firmware and production. See portfolio.

2012–Presente **Development and production of electronic equipment**, *Piscina Natural* , , .
In conjunction with the company was developed a system for the generation of chlorine from saline water was developed to keep the pools clean. See portfolio.

2011–2016 **Consultant and developer of electronic equipment** , *Softron* , , .
Consulting and development of electronic equipment and solutions for energy measurement and monitoring using Zigbee wireless and GSM technologies. See portfolio.

2011–2017 **Consultant and developer of electronic equipment** , *Grupo Koner* , , .
Consulting and development of equipment and electronic solutions for the automatic vehicle location, AVL. I worked mainly in the development and integration of an RFID card reader for drivers registration. See portfolio.

2005–2019 **Director in engineering company** , *disenioconingenio* , , .
Personal entrepreneurship Engineering study that offers electronic design services to companies, with ability to develop and manufacture electronic equipment, hardware, firmware, software, mechanics, PCB routing, assembly of PCB's SMD and TH, 3D printing, CNC machining, laser cutting and engraving and commercialization of equipment for access control RFID, monitoring of Ethernet temperature, automation of machines, converters of protocols, etc. See portfolio.

2011–2014 **Consultant and developer of electronic equipment** , *Seconsat* , , .
Consulting and development of electronic accessories for the AVL business. I work mainly in a new multi sensor wireless dongle for AVL integration. See portfolio.

2003–2005 **Electronic equipment developer** , *Digicard* , , .
Company referring to the national level in the area of access control. Work was done on the development of an RFID reader of 125khz for the line of access controllers. I participated in all the stages since the requirements request, schematic design, PCB layout, prototype, start-up, firmware, and production documentation The reader is actively actively marketed by the company. See portfolio.

2002–2003 **Firmware developer for microcontrollers** , *Pump-Control* , , .
Company dedicated mainly to the design, development and production of electronic controllers for the distribution of hydrocarbons. Work was done in the area of firmware development for 8bit microcontrollers of the Atmel line, implementing 1-Wire communication protocols, access control and dispenser control fuel.

Teaching

2017–2017 **Introduction to robotics** , *Siglo XXI School* , , .
A day of introduction to robotics was given for students from the third to fifth year, showing the history, basic concepts and culminating with a practice in different commercial platforms See certificate.

2004–2004 **Altera FPGA programming intensive course using Quartus II** , *ITBA* , , .
An introductory course with practical activities was carried out using an Altera evaluation board. See material.

Research

2015–2016 **Scholar in the National Atomic Energy Commission** , *CNEA* , , .
I worked as a fellow in the completion of a fully developed PET (Positron Emission Tomography) in the center on which the doctoral thesis plan is developed. Particularly, work is done in the area of acquisition and processing of digital signals on high performance FPGA. The scholarship is terminated doubt as a move to another city. See portfolio, see material 2015 , see material 2016.

2009–2009 **Assistant in the Research Center of Lasers and Applications** , *CITEDEF* , , .
He worked as an assistant of Dr. Jorge Codnia and Lic. Laura Azcárate in the assembly of a flow condenser, which with the help of a laser produces isotopes of interest, and the first advances in a new mass spectrometer of flight time. See material.

Courses and seminars

2018 **LATAM 2018 Entrepreneur Competition**, *MIT - ITBA* , 8hs , I participated as a jury of the LATAM 2018 contest, organized between MIT and ITBA. I analyzed innovation and entrepreneurship projects from Latin America. See certificate See details .

2017 **LASCAS 2017 Tutorials: Dependable Digital Systems and Fault Tolerant FPGA Design** , *INVAP, Bariloche* , 8hs , .

2017 **SASE 2017, Argentine Symposium of Embedded Systems** , *UBA* , 8hs , See certificate .

2016 **SASE 2016, Argentine Symposium of Embedded Systems** , *UBA* , 8hs , See certificate .

2015 **Doctorate PSI Meeting: Models, Simulation and Fabrics Engineering** , *Favaloro, GIBIO 2015*, 8hs , See certificate .

2015 **SASE 2015, Argentine Symposium of Embedded Systems** , *UBA* , 6hs , See certificate .

2015 **Advanced techniques of digital design** , *UNICEN* , 40hs , Advanced virtual course of techniques of digital design by engineer Guillermo Jaquenod .

2013 **SASE 2013, Argentine Symposium of Embedded Systems** , *UBA* , 18hs , .

2012 **Introduction to Latex**, *UP Palermo University, IEEE-UP Student Branch*, 2hs , Ver certificado .

2012 **First days of signal and image processing** , *UTN, GIBIO 2012*, 8hs , See certificate .

2012 **SASE 2012, Argentine Symposium of Embedded Systems** , *UBA* , 18hs , .

2011 **SASE 2011, Argentine Symposium of Embedded Systems** , *UBA* , 18hs , .

2010 **SASE 2010, Argentine Symposium of Embedded Systems** , *UBA* , 18hs , .

2008 **Conference on wireless technologies of Digi RF** , *EDE2008 Electronic Design Expo* , 6hs , See certificate .

2007 **Practical theoretical course of screen printing oriented to the manufacture of PCBs** , *32hs* , See certificate , .

2007 **Analog performance seminar using Silabs microcontrollers** , *8hs* , See certificate , .

2006 **Launch of Freescale RS08KA microcontrollers, accelerometers and sensors** , *8hs* , See certificate , .

2006 **Releases Freescale Coldfire microcontrollers 32 bits** , *10hs* , See certificate , .

2004 **Rabbit microprocessors and Dynamic C** , *24hs* , See certificate , .

2002 **Practical theoretical course IA, Artificial Intelligence** , *ITBA* , 18hs , See certificate .

1995 **Amateur radio course with licensing LU9JGM** , *Radio Club Concordia (LU9JJ)* , 48hs , See certificate .

Awards

2002 **Initiation in research and development I+D ITBA** , *1 th prize* , , .
Design and Simulation of a pipeline-structured Floating Point Unit for high performance general purpose processors See material.

2001 **Battle Tek robots championship, ITBA** ***Ingenio en Acción*** , *3 th prize* , , .
Discotech Robot A fight robot was designed and manufactured based on a high speed rotating disk with 2 protruding edges that impact against the adversary and a pneumatic ramp. See certificate , see news.

Works and Publications

2018 **Three Axis CNC Machine Controller** , *Specialization in embedded systems* , , .
Final work of the specialization course in embedded systems, Director: Ing. Juan Manuel Cruz see material , see presentation , see public defense , see videos .

2010 **Smoothing of images by inhomogeneous diffusion** , *Biomedical image processing, UTN* , , .
Final work Processing of biomedical images, Tutor: Dr. Castro See material .

2008 **Study of photo thermal techniques applied to the measurement of gas flow.** , *CITEDEF* , , .
I was presented under the tutelage of Dr. Francisco Manzano and as goal of approval of Optoelectronics II. See material .

2004 **Design and implementation of a dynamic screen based on 3200 filament lamps with 16 gray scales and 20fps updatable by ftp.** , *LampMatrix, Thesis, ITBA* , , .
Under the tutelage of Professor Villamil, an advertising screen based on filament lamps was designed and manufactured entirely. See video , See material .

2003 **Design and Simulation of a pipeline-structured Floating Point Unit for high performance general purpose processors** , *JAIIO 32 th Argentine Conference on Informatics and Operational Research* , , .
See material .

2003 **Selection of the Optimum Stage Number in Pipelined Floating-Point Units** , *CACIC, Argentine Congress of Computer Science* , , .
See material

Technologies Experience

Operating Systems

Advanced Linux (Debian, Crunchbang, Bunsenlabs, Ubuntu, Slackware), FreeRTOS, Windows(XP, Seven, Server2003, Office2000)

Medium FreeBSD

Básic OSEK

Outstanding Computer Software

Advanced crypsetup, vim, mutt, git, mercurial, gnumeric, ssh, bash, screen, tmux, pass, Allegro PCB Router, Slic3r, Pronterface, Mach3, LinuxCNC, Rhinoceros, RhinoCam, Orcad16 (Design CIS,Layout,Pspice), Flash MX, Borland C++ Builder, Octave, Wireshark, gcc, Xilinx (ISE y Vivado), Microsoft Visual Studio, VirtualBox, gdb, openocd, redmine, cups, Swat, Samba, Cura, Freecad, ceedling, anaconda, jupyther, ipython, gnuplot, ncurses, cdk, Kicad, LaTeX, gtkwave, icarus, ghdl

Medium OpenOffice, LibreOffice, Eclipse, Matlab, Jenkyns, pyfda, Mathcad, quemu, Arduino, svn, ffmpeg, Openscam, Webadmin, SonarQube

Basic Quartus II, Delphi, Blender

Programming Languages

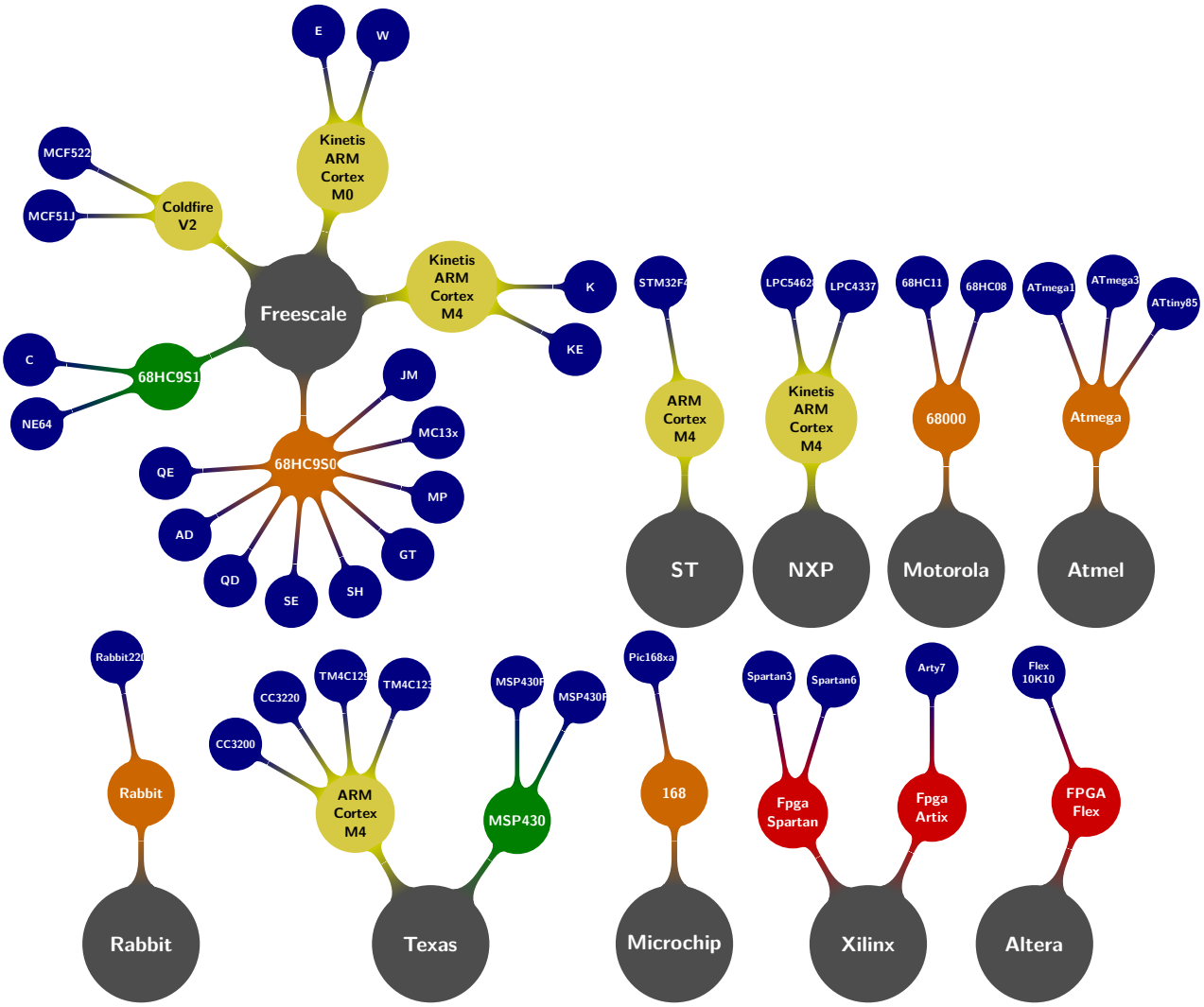
Advanced C, Octave, Verilog, assembler, VHDL

Medium C++, C#, Pascal, bash, makefiles, openHab, Microsoft Visual Studio, Python

Basic Java, Javascript, HTML

Microcontrollers, microprocessors and FPGA experience

Colors 8 bits 16 bits 32 bits Fpga



Communications protocols and digital techniques

Advanced	Ethernet, TCP, IPv4, SNMP, SMTP, NTP, ARP, UDP, SCI, SPI, I2C, LVDS, USB FS/HS, Zigbee, RFID, PWM, ADC, DAC, 1-Wire, RS232, RS485, PoE+
Medium	IPv6, CAN, 6LoWPAN, IEEE 802.15.4, lwIP, I2S, Radius, Modbus
Basic	HTTP, Lora, MIPI

Other technologies of interest

Advanced	Handling of assembly line SMD, Manual PCB welding by furnace and wave, 3D FDM printing, screen printing on rigid, screen printing of PCB's, CNC machining, Handling of laser cutting machine, handling of machine tools.
Medium	Manufacture of PCB's, arc welding, metal turnery
Basic	

Idioms

Spanish	Oral/Reading/Writing Advanced	*Native tongue*
English	Reading Advanced Oral/Writing Medium	*TOEIC 2005–785* See certificate
Hebrew	Reading Medium, Oral/Writing Basic	*Full Hebrew primary school*

Sports and recreational activities

2016–2017 **Basketball** , *Bariloche* , Nahuel sport club, facebook .
Training in the club's first division squad.

1983–1994 **Basketball** , *Concordia* , J.N.Bialik , .
Training from mosquito category to be part of the first division squad.

1995–2004 **Basketball** , *Buenos Aires* , University Basketball, ITBA .
Training on the campus throughout the whole race.

1994–Presente **Cycling** , , , .
Competition in cross-country category sub-23, competition in category sub-30 trialbike, amateur cycling to the present.

2014–Presente **Guitar** , , , .
Amateur learning of electric guitar and music.

Other activities and interests

- Physics
- Astronomy
- Motorcycling
- History of science
- Philosophy
- Cycling