Resume

Marcos Ariel Chaparro

I'm an Electrical Engineer with more than 10 years in firmware and hardware development, owning a full fledged electronics lab to prototype and validate in-house the dozens of succesful projects that went through my hands as a power electronics specialist.

Personal information:

Address: 2 de Julio 767, Punta Alta, Buenos Aires, Argentina
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Education:

University: Electronic Engineer, U.T.N. - Bahía Blanca. – 2014
                                                    GPA: 7.57 over 10
High School: "Bachiller con orientación Ciencias Naturales", Inst. José M. Estrada – Punta Alta. 2005.
                                                    GPA: 8.98 over 10

Experience

- Dozens of high performance motor drives developed and characterized, from 1kW to 100+kW, producing state of the art solutions and extreme drive unit integration at EV Power Designs Inc.
- DC/DC converter design from 2W to 2kW
- Lead powertrain engineer at Luna Cycle
- World-class KiCAD power user
- Developer and Co-owner at EV Power Designs, and Director of PALTA TECH S.A.
- Multiplatform GUI designer in Qt and QML
- Long time Debian GNU/Linux user, with experience in real time Linux kernels (preempt-rt and xenomai) and kernelspace development.
- Hard real time developments in C language for ARM, Microchip PIC and dsPIC microcontrollers.
- Qt4 framework, git version control, and Debian packaging.
- High performance computing using openMP, MPI, and Condor.
- Worked at the Hospital Naval Puerto Belgrano, repairing electromedical intruments and upgrading lab equipment.
- Worked at INVAP in aerospace and military projects.
- Thousands of boards produced and assembled using SMT, including 2, 4 and 6 layer boards.
- Researcher at the "Grupo de Estudios de Bio-Ingeniería" (GEBI) in the Universidad Tecnológica Nacional.

Languages:

Spanish, native fluency.
English, good fluency, outstanding written communication and documentation.

Publications:

2010: Co-author of the paper "Herramienta Computacional Para la Determinación de Mapas Electromagnéticos de Radiofrecuencias." N. Mata, P. Baldini, Ch. Galasso, M Chaparro, M Silva Bustos. Exposed at EMNUS 2010, UTN, FR Haedo.
2011: Congreso Argentino de Ciencias de la Computación, at UTN Facultad Regional Mendoza
2012: Sistemas embebidos robustos (HW, SW, DFM) at UTN FRBB

Honors and prizes:

1st prize winner of the 2020 PCBway PCB design contest

Hackaday Prize 2019 Finalist and winner of the Best Production Award with the 100kW Axiom Motor Controller.

Top 10 MIT TR35 Innovators Award from Argentina and Uruguay 2013

First prize, Frida international program
Winner in the Development category with Electrosmart project

JCI-TOYP 2012
The Outstanding Young Persons of Buenos Aires, in the category DESARROLLO CIENTÍFICO Y TECNOLÓGICO, from the JCI.

First Prize Asociación Marchigianar
December 2012
Portable ECG for mobile devices
Winner between 150 projects.
The ECapital 2012 contest is supported by La Región de Le Marche, Embassy of Italia, Deloitte, Emprear, Hope Funds, Andreani, Lupa Corp, Ariston, Brandoni, Pieralisi and ArsUltra.

Third place at INNOVAR
November 2012
Portable ECG for mobile devices
The third most voted projects between more than 2000 projects.

Second place Banco Santander Río
December 2012
Portable ECG for mobile devices

24hs de Innovación
International 24h competition, competing against 2000+ teams, 8th place.