**Fernando Valencia Gil**

Electronics and Computers SW Engineer

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**Professional Summary:**

“Functional Electronics Validation Engineer with training in Electronic Engineering. Has 15 years

of experience focused on the application of technology in business functions in the areas of

manufacturing, silicons semiconductor, automation and testing. Worked at intel where his most

important achievement was supporting multinational teams, and the negotiation of a software

license, which he obtained, allowing the company to save 4000USD per year in test validation.

His key skills: experience of Python and Shell Scripting, tools SQL, Unix commands,protocols of CAN FID, testing, knowledge of SystemVerilog RTL.

and negotiation, knowledge of microwaves RF circuit.

Personality traits: clear vision of project outcomes, excellent stress management, and being

adaptable. He enjoys bringing his projects o success in a timely manner.”

**Work History**

**SoC Functional Validation Engineer at Intel, Zapopan Mexico 2021 —2024**

Focus on the functional validation and characterization of Power Management, Reset networks and boundary scan:

* Boundary Scan verification, using the methodology of BSDL (Boundary Scan Description Language), using Python and onTAP tool from FlynnSystem company. This is through access for JTAG TAP (Test Access Port). Validation Goal is to review component integrity through the electrical design of the component’s BScan circuitry. During this activity, over US$4000 were saved in tools and licenses for execution. In the process, a HW Silicon Bug was found, to be fixed in next build.
* PreSilicon and PostSilicon validation of Memory and Intel Processors, analyzing product specifications, creating validation test plans, development of test and debug scripts, automation, execution and debug. Programming (reflashing) of FPGAs and IFWI (BIOS) for platform boot and boot log analysis.
* Good understanding of Power Management architecture covering memory traffic, power states, core states, SX save states, core turbo frequencies, thermal and catastrophic errors. Also controlling system power through CPU and DRAM power limits, interacting with firmware.
* Python programming, automation and improvement of for silicon validation. Design robust and modular automation system across hardware and software to improve efficiency.
* Strong debug skills, using Logic Analyzer, ITH trace tool, Visa (Visualization of Internal Signal Architecture); a debug feature that enables visibility of internal signals to be routed through a series of multiplexers connected, and the ability to analyze complex electronic circuits, ability to work under pressure.

**Sr. Test Engineer at Jabil SA de CV, Guadalajara Mexico 2017- 2021**

* Direct support on the production floor at Jabil campus for Customer family test line (Reality mix-up technology, BLTs, JTAG, FATP, eSPI and UART). Work within customer design team at Plantation Florida for NPI, In charge of training of Engineers and Technicians.
* Investigation of hard debug cards and bone pile cards to keep low inventory. Make sure the first pass yields are above 80% and take actions for low yields, handle daily, weekly meeting with Customer staff to improve yields.

**Sistecozome Transportation Company, Guadalajara Mexico. 2012-2017**

**Company dedicated to transportation of personnel.**

**Analyst Engineer Manager.**

Responsible of improvement of database in the company to get the information more efficiently

and more accurate on equipment and user information:

• Support to network computing.

• Innovation mindset for improvements (Developed a software in excel to analyze costs efficiently).

**Test Engineer at Flextronics Manufacturing S.A. de C.V., Zapopan Mexico. 2007 - 2012**

* PLC profile programming on EST to energy save and improvement of test time to support the production capacity according to the customer specifications and requirements increase capacity till 40% for 8 codes.
* Close work with Alcatel designers and software to validate the capacity constraints and bonepile reduction.
* Transfer of 5 data test stations, 12 System test stations and 2 EST from Boston MA USA to GDL on time and budget.
* Work on KAIZENS to Support the production capacity according to customer specifications and requirements with a decrease of time test until 80%.
* Skills on Spectrum analyzer, DCA, Power meter, Tunable laser source, Optical switch fiber scope, Smart Bits, VXI, Gnubi, ANDO Switch, and Omniber710
* Strong leadership managed 15 debug technicians and 6 test technicians.

**Technician and Support at Asciende Computación SA de CV, Guadalajara. 1998 -2007**

* Support and maintenance to the test stations.
* Coordinate and give support to debug technicians
* Control of inventory of test items.
* Assembly, Setup of Networks and Computers

**Education:**

**Engineer Electronics and Computers, (CETI) Centro de Enseñanza Técnica Industrial, Zapopan**

Graduated with a specialty in computer network.

**Certifications**

* Python essential learning,
* Lean Manufacturing Kaizen, SQL Essential

**Languages:** Fluent in English and Spanish.