Mr. JUAN CARLOS DERGÁN FEBRES

Current Location: Sntgo de Surco, *Lima – Perú*, **Time-Zone:** UTC/GMT -5hours **Tlf**: (511)-915189781 **E-mail**: jcdergan@aol.com **exp-job**: click here

Associate Degree: **Software Experience & Electronic Knowledge**. Post Graduate: **Data Networking at UPC – Lucent Technologies.**

Born: july 04, 1973.



I. PROFESIONAL SUMMARY.-

We need always to research to understand the basic minimal behavior of things, science physics, electricity, software, etc, in many cases we don't have the ideal environment to do it, but we can use our relationships on it.

My experience in software and electronics allows me to see a complete panorama through many pinholes of technologies, we can't see the full HD; in consequence, I strive for better results, fixing or making trigger solutions on any vertical processes in my context; My job experience was released in many markets; electronic maker, support CAS, automation/instrumentation, telecommunications, transport, and logistics.

However, in recent years, I have primarily focused on software web(full-stack), desktop, and mobile programming, with experience in logic algorithms, math analysis, and many issues required by the IT industry.

Maybe the most relevant case was to develop a cheap solution in software for renumbering some thousands of mobile phones through a prepared asynchronous cable, another case was replacing avl devices with mobile phones or replacing maps with GoogleEarth(GIS) and many other experiences like queues, mobile applications, m2m/IoT or some tiny embedded bootstrap solutions, etc; all of these are possible considering that we can make a roadmap of continuing learning from new points of view over the wheel, as the magic key.

If you find value in what I bring, I am available to contribute to your team in any capacity you see fit.

II. Proficient SKILLs and EXPERIENCES: (experiences based on testing, scrum stages.)

1. Software (microservices/IaaS,SaaS): Strong on logical algorithms.

Knowledge/Anatomy in OOPs, lambda expression languages: python/micropython, js, Android/java/kotlin(IPCs, phone state, sms services,gps, tcp/ip, udp, http, bluetooth, canvas, sensors, etc), embedded C/C++(gcc), vb60(com+), Excel/vba and minimal experience vb/c#.net, dart/flutter, kotlin/gradle, etc; **fullStack**: flask/bootleJS, Nodejs/Express, IIS, and **frontend**: Html/css(xml/ json/ yaml), React+Vitejs, jQuery, bootstrap, p5.js, classic asp for responsive web design, with handling asynchronous requests (AJAX, fetch) and interfaces RESTful APIs with JS/ES6, additionally using python sci/math modules, embedded-android, google APIs(maps, earth, leaflet, so on). **Summary**: My most recent development was release on microPython, js/html/css, Android/kotlin.

2. IDE, SDKs, Frameworks and AI-Tools(whisper, codiumAi, gpt, copilot\$\$):

O.S.: Linux Rasbian, Ubuntu, Debian, Android, Windows (.dlls, .exe, .ini, .files).

Web: nodejs, ExpressJs, pug, socket.io, python flask, html/css, JS, webhooks, svelte, com+dll, asp.

Desktop: VB60,micropython, JS, Android-java-kotlin, Java-8/j2me, java11, VB/C#.net, 8/16bits c/c++(gcc/clang).

DBs: Ms-SQL, MySQL, PostgreSQL, MongoDB, SQLite, FireBase, and so on.

IDEs: VSCode, VStudio, Eclipse, NetBeans, AndroidStudio, jupyter Ntbook, pyCharm, IntelliJ, Cursor.

Modules: conda, Tkinter, pyQT5, Kivy, BeautifulSoup, Scrapy, Matplotlib, Panda, NumPy, twillio, etc.

Team Tools(cloud): GitHub, Repplit, DeepNote, Discord, slack, etc.

Embedded Dev: Smartphone/tablets/smartwears Android , Raspberry Pi family, OrangePi, ESP32-XX, MSP430, Arduino, nfr51xx, sensors, many boards for power supply, and handheld kits , etc.

SDk Electronic Tools: Eagle pcb, RfSmart Studio, Proteus, platformIO, Node-RED, etc.

Instruments : A/D Multimeter, Oscilloscope, Spectrum analyzer, Function Generator, Network Analyzer, signal strength analyzer, power Supply, measure SQE/RSSI for mobile devices, etc.

- **3.** Good base for understanding and adapting to new electronic technologies, tools & utilities for hardware connection algorithms, use android base to Connect many devices for house, industrial automatization, and so on, including; tcp/ip stack(http,udp,soket), pid loop, bluetooth(ble), uart,pwm,spi,rf,usb,i2c,modbus, can, rf measurement SQE/RSSI signals, fhss/fsk/ask/nrz, mgtt,CoAP, gsm/gprs, and some useful mesh topologies net.
- **4. Dev-kits,SBCs** electronic devices that require a very comprehensive knowledge of home/Industrie automation, using tiny embedded build systems, peripherals, edge interfaces i/o circuitry controllers, and mobile/bridge/routing network extensions, terminal pos, assistants like Alexa/google voice, bots, IoT, and so on; supported with a good understanding of instrumentation tools (oscilloscopes, spectrum analyzer, sdr, etc)

5. Advisor in Next-Generation Tech Project Management, with a basic Comprehensive Understanding of KPIs, n Big O notation for performance, and Statistic Analysis in Financial Markets as well.

III. WORK HISTORY and ACHIEVEMENTS:

Currently, as an enthusiast in research and developer, I'm testing model LLMs / frmworks in AI with Python tools, intro to TinyML for edge computers, Tensorflow, Scikit-Learn, OpenCV, and so forth for many things for detecting Objects.

1.- BW2Technologies AG - Switzerland - 2022:

As a software developer for financial platform ERP BW2 using Business Object architecture with Microsoft Visual Studio 2019 IDE. VB.NET/C#, most of the time refactoring code (14 hrs/day). https://www.bw2.com/

- My job was to refactor and support the flow of business using the APIs in VB.Net for customers' demands, one of my contributions was to make a more efficient algorithm.

2. MicLab Soluciones / Miclab IT, July 2010 - 2020:

Lately, as an advisor tech, team leader in IT in software, m2m/loT, MVPs draft and project overviews.

- Manage APIs tools for GIS projects, maps, and interactive front-end pages, the challenge of using low memory on the side of the customers, for security watchdog systems, route maps, smart devices, etc.
- Dispatch fleet of vehicles, I proposed using Android devices instead of AVL devices creating more services for customers, increasing the invoicing (tcp/udp servers, web dashboard, position/speed, times-lap, etc).
- Drive an analysis of all risks to convert standard security devices/controllers systems, into specific smart systems/alarms with more options for microelectronic devices for defined purposes in a defined environment. I proposed to make external electronic interfaces using all features of Android architecture devices (service background, sms, phone calls, video, localizations/lbs, signal strength, battery, etc), for continues displacement objects.
- In combination with new features with home assistants like Alexa, we make a simple generic discrete/analog i/o-control, connected by Bluetooth, wifi, and async serial interfaces, with SBCs for generic propose.
- Complete framework for Industry, from edge computer to cloud/db server solution telemetry (displacement sensors, strengths, optical, Rf comm, etc).

3. NEXTEL DEL PERU (Subsidiary of NII Holdings) August 2003 - April 2008

Re-search Data developer making MVPs for commercial Area. My Most outstanding experiences:

- Solutions with smartPhs m2m, using j2me(Java), making interfaces over scanner, printers, pos, self-service machine, SBCs, plcs, my function was to begin quickly draft of blueprint to make sales.
- A great jobs was to connect a coffee machine and a roll-slot casino machine with the phone to get the bills.
- BackEnd Software Support for locating GPS(AVL), triangulation for fleet and vehicles.
- Recognition for proposing an economical solution for re-numbering cross-fleet motorola radio-phones.

4. NEXTEL DEL PERU (Subsidiary of NII Holdings) October 2000 - August 2003

Setting services (FulFillment Department) for Motorola iDEN and Radio Trunking Devices. Projects Involved (③ rf = radio frequency)

- Configuring and testing platform radio/phone/data for all type of handheld Motorola devices.
- Custom "Drive Test" for quality and power signals sqe, rssi, codeColor, neighborhood sites.

5. ASC - COSAPI DATA S.A - EPSON. January 1998 - January 2000

Laboratory, Senior-3 technical support specialist, notebooks, printers, scanners, data displays, power units, and programming drivers for computer machines(Unix BSD, linux, basic/pascal) and as a coaching instructor -Caracas Venezuela/Lima Perú.

6. OTHER EXPERIENCIES Now: chatBot for IoT & Voice, Alternative to Remote Control for different devices, alternative smart screen for vehicles, and many more gadgets for this world, etc.

IV. EDUCATION:

• Lucent Technologies - UPC (Lima, Peruvian University for Science).

Post-Graduate Degree in Data Networking November 2001.

Frame Relay, VPN, VoIP, Bridging, Switching, Routing, Fiber Optic, H.263/264, others.

- Associate degree in Electronics from CIBERTEC Lima, Peru (+3yrs degree program).
- Advanced English Language. (Read, write amd speak with a good understanding of Technical English).
- Leadership Nextel July 2007 Lima Peru.
- Leadership and Values Integration for Job.

V - COURSES UPDATES & CERTIFICATIONs:

- OpenCV & Al.(certificate coming soon..)
- Solid knowledge of fundamental high-math, boolean, and discrete algebra. (https://projecteuler.net/).
- Introduction to Python, Data Camp 2020/2022 (with certificate).
- Introduction to Data Science in Python, Data Camp 2020/2022 (with certificate).
- The Our of Code, ComputerScience, processing.org, code.org 2020 (with certificate).
- Programming Mobile Applications for Android Handheld Systems, Coursera 2014 (without Certificate)
- Software Development Methodologies in ANDROID, UNI 2012 (without Certificate)
- Development course for Microchip dsPIC 30 / 33F and PIC18F Lima Peru 2011 (with certificate)
- DotNet, C # .net and VB.net , UNI Lima Peru 2010 (without certificate)
- · Blackberry Programming and Support, Nextel Lima Peru April 2007 (with certificate)
- Java update course, Nextel Lima Peru April 2004
- IBM Course in Java for correct use of APIs for Motorola phones software. (certificate 2004).
- Support Engineer and Laser Jet Printing Engineering: 4050, 5000, 5si, 5SI, 8000, 240, 800 and 8100, HEWLETTPACKARD PERÚ August 2000 (with certificate)
- PC, Notebooks and Servers, ACER PERU Lima Peru December 1999 (with certificate)
- PC, Notebooks and Servers, ACER PERU Lima Peru October 1998 (with certificate)
- Microsoft Office 97, Visual Basic, Linux, UNI Lima Peru April November 1997.
- EPSON Inkjet, Matrix and Laser Printers, Caracas VENEZUELA June 1996.
- Speaker, Colloquium of Electrical-Electronic Studies, Pontificia Universidad Católica del Perú IEEE.
- EPSON Inkjet, Matrix and Laser Printers, Caracas VENEZUELA June 1995.
- Maintenance and Configuring Computer Equipment of CIBERTEC Institute.
- •Since childhood, I have been directly involved with devices such as walkie-talkies, telephones, mechanical motors, Atari games, and chemistry kits.

Note

Last courses from 2013 to date have been taken from virtual classroom.

UNI = Universidad Nacional de Ingeniería (National University of Engineerings Perú).

UPC = Universidad Peruana de Ciencias (Peruvian University of Science).

CIBERTEC = Institute Partners UPC University in Information and Technologies.

OOP = object oriented programming.

SBC = Single Board Computer.

MVP = Minimum Viable Product - prototype (valid for Software and Hardware solutions).

On my Own Time = read, repair gadgets devices, software/tables games, swimming, bikes, ready to be onboard;), etc.

REFERENCES:

- 1.Copy of Recognition Letter from the Operational Fulfillment Area of Nextel Peru (2001).
- 2. Copy of Recognition Letter from the President of Nextel Peru (NII Holdings), Ing. Miguel Rivera, 2007. (https://www.upc.edu.pe/en/nosotros/autoridades-upc/consejo-consultivo/).
- 3. Greeting and Recommendation Letter from the Commercial Director of Nextel & NII Holdings 2002, Mag. Luis Deza (https://pe.linkedin.com/in/luisdeza).
- 4. Luis M. Palacios. (https://pe.linkedin.com/in/luis-miguel-palacios-delgado-38a22520).
- 5. Jacque-line Diez Chng (tlf: (+51-1)993148609)

Fun Experience!:

