**Nelson Garcia Rodriguez**

**SOFTWARE DEVELOPER / ELECTRICAL ENGINEER** [nelson831002@gmail.com](mailto:nelson831002@gmail.com)

Tel: 514-746-5596

***Solutions-oriented engineer***

Software Developer, with experience in the software industry and a College Degree in Electrical Engineering. Experience in .Net development environment, LIMS architecture, communication systems, Hardware Description Languages, Digital Signal Processing and programmable devices.

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| **PROFESSIONAL SKILLS** |

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| ***Programming languages:*** | C#, C++, MATLAB, VHDL, Java |
| ***Server Development:*** | .NET, ASP.NET MVC, LINQ |
| ***Web Development:*** | HTML, CSS, JavaScript, WCF, REST, SOAP |
| ***Database Systems:*** | SQL Server, PostgreSQL, MySQL |
| ***Source Control:*** | GIT, SVN, TFS |
| ***Testing:*** | Autofac, RhinoMocks |
| ***Concepts:*** | OOP, Functional Programming, TDD, Continuous Integration (CCNET), Agile (SCRUM) |
| ***Task Automation:*** | Bash |
| ***Languages:*** | Spanish (Native), English (professional working proficiency), French (Elementary proficiency) |

**WORK EXPERIENCE**

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| ***ISU Corp.*** | **April 2013 – Present** |

Software Development Company. .Net backend developer, frontend developer mostly in win-form projects for corporate environment, closely worked with clients to convert requirements into features.

* LIMS solution for Labstat company (<http://www.labstat.com>), from back-end to front-end. The system was build using Devexpress controls, MVVM architecture, DDD, Autofac IoC and SOAP web services.
* Maxxam LIMS. Multiples correlated win-form applications for Maxxam company (<http://maxxam.ca>), as part of a more general LIMS. Integration with Maxxam framework.

**Technology:** *.Net C# Devexpress SQL EntityFramework WebServices WCF TFS SVN*

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| ***Havana University.*** | **September 2012 – April 2016** |

Network Administrator. Small team administrating the main servers in Havana University.

* Configuring network services over Linux platform (Debian, Ubuntu), such as proxy (squid), DNS (bind), web server (apache), mail server (postfix).
* Monitoring network resources utilization and implementing solutions for load balance.
* Basic configuration of network equipment’s

**Technology:** *Apache webserver, squid proxy, Bind DNS, postfix mailserver, PostgreSQL Git*

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| ***Freelancer.*** | **October 2012 – January 2013** |

Software Engineer. Small projects based on MATLAB and C++; the main development was a Content-based image retrieval system.

* Content-based image retrieval system that handles different selectable retrieval techniques (color, textured, shape, spatial form) and its combinations. Implemented over MATLAB, it uses color moments, Gabor wavelets, invariant moments and quad tree decomposition as the basis of the algorithms and hierarchical and K-Means clustering to reduce search order and increase efficiency.

**Technology:** *MATLAB, C++*

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| ***R&D Institute in Telecommunications (LACETEL)*** | **September 2007 – August 2012** |

R&D Engineer. Leading and/or collaborating in different projects including Control Software for Telecom Equipment, Digital Signal Processing, Hardware Description Language and Electric Circuit Schematic Design.

* Chief of Research and Development Group for Digital TV. Leading the project for the design of modulators for DTMB standard.
* Design variations in frequency synthesizers with PLLs in the VHF and UHF bands.
* Implementing control software (C++, Java) for telecom equipment.
* Designing DTE for the remote control of telecom equipment, employing VHDL over Xilinx FPGAs

**Articles (in Spanish)**

* Diseño FPGA de un modulador DTMB para canalización de 6MHz, RIELAC, August 2012
* Transformada De Fourier para el Estándar DTMB de Televisión Digital, Informática 2013, ISBN: 978-959-7213-02-4

**Technology:** *C++ Java VHDL Xilinx ISE ModelSim Orcad*

**EDUCATION**

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| ***Master Degree*** | |  |  | | --- | --- | | *Master in design of electronic systems*  *Engineering University of Havana (CUJAE)* | **Jun 2012** | |
| ***Bachelor’s Degree*** | |  |  | | --- | --- | | *Electrical Engineer (GPA of 4.4 of 5)*  *Engineering University of Havana (CUJAE)*  *Thesis Diploma: “Management System for CUJAE’s Postgraduate courses, based in PostNuke CMS”.* | **Jun 2007** | |

*Find me on:*

 *LinkedIn*: <http://www.linkedin.com/in/nelson831002>